THE
PEDAGOGICAL SEMINARY
Founded and Edited by G. STANLEY HALL

VOL. XVIII JUNE, 1911 No. 2

THE LAW AND THE AMERICAN CHILD[1]

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(1) INTRODUCTION

Beneath the Children's Institute at Clark University, there is a statue of the late George Frisbie Hoar—a former Trustee

[1]The writer is indebted for assistance to President G. Stanley Hall, Dr. William H. Burnham, Dr. Theodate L. Smith and Librarian Louis N. Wilson, of Clark University, also to Thomas J. Homer, Esq., of Boston, Rev. John J. McCoy, LL. D., of Worcester, Dr. George E. Wire, of the Worcester County Law Library, and Librarian Robert K. Shaw, of the Worcester Free Public Library.

of the University, a United States Senator and a Jurist. To some interested in Child Welfare this statue symbolizes that courage, hope and humanity which characterized the Senator's life and which were manifested in his prevention of the deportation of the Syrian children in 1901, and in 1903 led the second session of the Fifty-seventh Congress to enact Sec. 37 of Chap. 1012 of the United States Statutes, which provides "Whenever an alien shall have taken up permanent residence in this country and shall have filed his preliminary declaration to be a citizen and thereafter shall send for his wife or minor children to join him, if said wife or either of said children shall be found to be affected with any contagious disorder, and it seems that said disorder was contracted on board the ship in which they came, such wife or children shall be held under such regulations as the Secretary of the Treasury shall prescribe until it shall be determined whether they can be permitted to land without danger to other persons; and they shall not be deported until such facts have been ascertained." (19, 2, 298.)

Near the northern terminus of the same street on which the University is located, stands the Worcester County Court House. Within a few steps beyond the entrance, the visitor comes to an arch on which is emblazoned: "Hère Speaketh the Conscience of the State Restraining the Individual Will."

On Thursday, January 26, 1911, in an address to the young men and women of the Worcester Evening High School another who measures up to the best traditions of the Massachusetts Supreme Court Bench, Mr. Justice Rugg, said: "I believe those words of Senator Hoar at our Court House make the best definition of law extant." Law, then, in the United States at the beginning of this second decade of the twentieth century, may be assumed to be that legislative and judicial expression of the public conscience by which the individual is governed. And as our people are the State, it would seem to follow that our laws are never better nor worse than the American people demand.

The term "child" in this study is synonymous with the legal term "infant" and is intended to include all the years of minority.

The following pages contain a brief survey of some laws that concern the American child. It is not the purpose of this paper to follow out any of these laws in detail, to do so would require a separate volume for each of several of the laws outlined. The recency of the laws mentioned in this study is noted under the topics through references to the bibliography. Statutes, later than those cited by some of the authorities enumerated in the bibliography, have been inserted. Ob-

viously no claim can be made that the latest revisions have been presented—the legislatures of most of the states are now in session and new laws are being enacted daily.

(2) Marriage

Just as infancy is the legal status of persons under age, marriage is the legal status of husbands and wives. After a valid marriage man and woman are husband and wife, and their offspring are legitimate children.

Professor Stimson in his "Popular Law Making" says "It is always to be remembered that the law of marriage, and divorce as well, was originally administered by the Church. Marriage was a *sacrament;* it brought about a status; it was not a mere secular contract, as is growing to be more and more the modern view. Indeed, the whole matter of sexual relations was left to the Church, and was consequently matter of sin and virtue, not of crime and innocence. Modern legislation has, perhaps, too far departed from this distinction. Unquestionably, many matters of which the State now takes jurisdiction were better left to conscience and to the Church, so long as they offend no third party nor the public." (39, 324-5.)

Capacity of Parties in General. A person may be generally incapable of contracting marriage because of (a) want of age; (b) want of mental capacity; (c) want of physical and sexual capacity; (d) relationship by blood or marriage with the other party; (e) being of a different race from the other party; and (f) having been married before and that marriage not being at an end.

(a) Want of age. At common law the marriage of a male over fourteen and a female over twelve was valid. At least "thirty states, including the District of Columbia have by statute prescribed a higher age limit for marriageable consent, and in those states the marriage of a minor below the common law age of consent and the statutory age of consent is voidable by the minor on arriving at the statutory age of consent.

"In Minnesota and Wisconsin the statutory age of consent is fixed at 18 for the male and 15 for the female, but the statute does not declare that marriages under such ages, shall be void, therefore the courts have held them to be voidable, only. In the remaining 17 states the ages of consent remain the same as at common law. Three of these states, Kentucky, Louisiana and Virginia, having adopted said ages by statute" (1,1136).

The lowest statutory age for a male is fourteen. The states in which marriage can be contracted by a male at fourteen years are Kentucky, Louisiana, and Virginia. The

states in which the statutory limit is fifteen years are Kansas and Missouri. Those in which it is sixteen years are the District of Columbia, Iowa, North Carolina, Texas and Utah. Those in which it is seventeen years are Alabama, Arkansas, and Georgia; those in which it is eighteen years are Arizona, California, Delaware, Idaho, Illinois, Indiana, Michigan, Minnesota, Montana, Nebraska, Nevada, New Hampshire, New Mexico, New York, North Dakota, Ohio, Oklahoma, Oregon, South Dakota, West Virginia, Wisconsin and Wyoming; and twenty-one in most of the remaining states.

Age limit for females. The lowest age at which a valid marriage can be contracted by a female is twelve years. The states in which the statutory limit of twelve obtains are Kansas, Kentucky, Louisiana, Missouri and Virginia. In the following states it is fourteen years: Alabama, Arkansas, District of Columbia, Georgia, Iowa, North Carolina, Texas and Utah. The states in which the statutory limit is fifteen are Minnesota, New Mexico, North Dakota, Oklahoma, South Dakota and Wisconsin.

The states in which the statutory limit is sixteen years are Arizona, Delaware, Illinois, Indiana, Michigan, Montana, Nebraska, Nevada, New Hampshire, Ohio, West Virginia and Wyoming. The statutory limit is eighteen years in Idaho, Massachusetts, and New York. In other states for which no minimum marriageable age is given the provisions of the common law seem to apply.

The age below which parental consent is required for the marriage of a male is twenty-one years in forty states and territories in three states it is 18, and in one state 16. In Tennessee it is sixteen years, and in Idaho and North Carolina eighteen years.

In Georgia, Michigan and South Carolina no age is fixed for parental consent for the male. The age below which parental consent is required for the marriage of a female is fixed at 21 in 9 states, at 18 in 34 states (including D. C.), and at 16 in 3 states. (1.1137.) It is sixteen in Maryland and Tennessee. It is twenty-one years in Connecticut, Florida, Kentucky, Louisiana, Pennsylvania, Rhode Island, Virginia, West Virginia, and Wyoming. No statutory limit is established in New Hampshire, New York, and South Carolina. In all the other states and territories it is eighteen years. In Massachusetts, permission from the Probate Court is required for the marriage of a male under eighteen or of a female under sixteen.

(b) *Mental Capacity.* The marriage of the insane, persons absolutely *non compos*, was always void both at Common law and the Church law as well. By recent laws Connecticut and Minnesota prohibit the marriage of an epileptic, imbecile,

or feeble-minded woman under 45 years of age or cohabitation by any male of this description with a woman under 45 years of age, and marriage of lunatics is void in the District of Columbia, Kentucky, Maine, Massachusetts, Nebraska.

(c) *Physical and Sexual Capacity.* Marriage of impotent persons has always been void; Michigan prohibits the marriage of persons having sexual diseases; by recent laws Indiana and California refuse marriage licenses to persons under the influence of intoxicants or drugs or infected with certain transmissible diseases; and "finally most startling of all the proposal looms in the future to make every man contemplating a marriage submit himself to an examination, both moral and physical, by the state or city officials as to his health and habits, and even that of his ancestry, as bearing upon posterity." (39.327-8.)

(d) *Consanguinity and Affinity.* Marriage between first cousins is forbidden in Alaska, Arizona, Illinois, Indiana, Kansas, Missouri, Nevada, New Hampshire, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, South Dakota, Washington and Wyoming, and in some of them is declared incestuous and void, and marriage with step-relatives is forbidden in all states except Florida, Hawaiian Islands, Iowa, Kentucky, Minnesota, New York, Tennessee and Wisconsin. In Hawaii, Porto Rico and the Philippines marriages are prohibited within the fourth degree of consanguinity.

(e) *Miscegenation.* Marriages between whites and persons of negro descent are prohibited and punishable in Alabama, Arizona, Arkansas, California, Colorado, Delaware, Florida, Idaho, Indiana, Kentucky, Louisiana, Maryland, Mississippi, Missouri, Nebraska, North Carolina, Oregon, South Carolina, Tennessee, Texas, Utah, Virginia and West Virginia. Marriages between whites and Indians are void in Arizona, North Carolina, Oregon, and South Carolina; between whites and mongolians in Arizona, California, Mississippi, Oregon and Utah.

(f) If one has been married before and that marriage is not at an end, he of course cannot contract another marriage. If he goes through the form of a second marriage under such circumstances, he is guilty of bigamy, which is an offense punishable in all states. In nearly all states and territories the statutes provide that a person may contract marriage after the disappearance of a former husband or wife (the former marriage not having been dissolved by divorce or annulled) if the latter has been continuously absent for a specified number of years and has not been known to be living during this period. The length of time which the absence without news has continued is three years in Florida, Iowa, and New Hamp-

shire. It is two years in Pennsylvania. It is seven years in Maine, Maryland, Massachusetts, Mississippi, Missouri, North Carolina, Oregon, Rhode Island, South Carolina, Vermont, Virginia, West Virginia and Wisconsin. It is five years in Alabama, Arizona, Arkansas, California, Colorado, Delaware, District of Columbia, Georgia, Idaho, Illinois, Indiana, Kansas, Kentucky, Louisiana, Michigan, Minnesota, Montana, Nebraska, Nevada, New Jersey, New Mexico, New York, North Dakota, Ohio, Oklahoma, South Dakota, Tennessee, Texas, Utah, Washington, Wyoming.

Marriage Licenses. "Wisconsin seems to be the only state requiring the license to be taken out several days before the marriage. Only two states, Louisiana and Maine, appear to have any provision for the filing of objections, by parents, guardians or others, to a contemplated marriage. In Louisiana the license issues immediately upon the making of the application. In Maine notice of the intention to apply for a license must be made at least five days before the issuing of the license." (1.1138.) New Hampshire has just adopted this Maine plan. All the states and territories, except South Carolina, require marriage licenses, and also, except South Carolina require every marriage solemnized to be reported to some official specified by law. However, in Maine, Maryland, Iowa and Kansas a license is not required for the marriage of members of the Society of Friends, or Quakers. In Pennsylvania, Delaware, Maryland, Georgia and Ohio the parties, instead of securing a license, may have recourse to the publication of banns. There are also other minor exceptions in certain states.

3. Divorce

The American people are divided on matters pertaining to divorce. Those opposed to any divorce, that carries the legal right of remarriage during the life time of the divorced husband or wife, sometimes combine with those urging the fewest legal causes of divorce, and the coalition presents a united front against the exponents of "the open door" in divorce legislation. Some of the divorce reformers maintain that there are insidious influences planning to amend the marriage vows, so as to read "Till *divorce* doth us part;" that such a modification can be expected of an age that has legally evoluted or devoluted or devilized unto progressive fragmentary polygamy and polyandry on the installment plan. They tell us that divorce is a modern institution; that is divorce by the secular courts; that such "divorce as the Roman Church, recognized (without the right of remarriage) or was granted by the act of Parliament, was the only divorce existing down to the year 1642, when one Hannah Huish was

divorced in Connecticut by the General Court, 'with liberty to marry again as God may grant her opportunity,' and about that time the Colony of Massachusetts Bay enacted the first law (with the possible exception of one in Geneva permitting divorces by ordinary courts of law" (39, 326). The divorce reformers allege that the advance in present methods beyond those of the seventeenth century is shown by many a modern Hannah Huish, who believing that God helps her who helps herself, makes her own "opportunity" by keeping on her waiting list at least one "minute man," who, too often, is himself waiting anxiously for some divorce mill to grind out the welcome refrain—"Off with the old, on with the new." They call our attention to the pathetic figure in some of these cases, *the child* learning the shifting designations for his father's former wife—his mother, his father's present wife—his stepmother, his mother's former husband—his father, his mother's present husband—his stepfather, with perchance a few other stepmothers and stepfathers intervening to complicate the task. They assure us that whatever the pedagogical value in the mastery of such a lesson, the child's ideals of "family life," "home," "mother," and "father"can hardly contribute much to his moral uplift before or his country's after his arrival at manhood. The adherents of latitude in divorces, on the other hand, have their array of arguments for their position. One or two typical replies are: "Many clergymen argue that to have only one cause, adultery, is the worst law of all, as it drives the parties to commit this sin when otherwise they might attain the desired divorce by simple desertion" (39,323). Again they ask, "How can the child be possibly benefited in a home of parents, that are agreed that their particular "marriage is a failure," but are willing to try other marriages? Moreover, the difference in condition, education, religion, race and climate is so great throughout the Union that it is unwise, as well as impossible to get all of our forty-eight States to take the same view on this subject, the Spanish Catholic as the Maine free-thinker, the settler in wild and lonely regions as the inhabitant of the old New England town over-populated by spinsters" (39, 323). "Nevertheless, it is not questionable that modern American legislation, particularly in the code States, in California, New York, and the west generally, is based upon the view that marriage is a simple contract, whence results the obvious corollary that it may be dissolved at any time by mutual consent. No state has thus far followed the decision to this logical end, on the pretended assumption that the rights of children are concerned but the rights of children might as well be conserved upon a voluntary divorce as after a scandalous court proceedings.

One possible view is that the Church should set its own standard, and the State its own standard, even to the extreme of not regulating the matter at all except by ordinary laws of contract and laws for the record of marriage and divorce and for the custody, guardianship, support, and education of children, which would include the presumption of paternity pending an undissolved marriage, but all divorce to be by mutual consent. It is evident to any careful student of our legislation that we would be rapidly approaching this view but for the conservative influence of Massachusetts, Connecticut, Pennsylvania, New Jersey, and the South, and but for the efforts of most of the churches and the divorce reform societies. Which influence will prove more powerful in the end it is not possible to predict." (39.325.)

Weak must be the grievance, and arrested must be the ingenuity of that husband or wife, in some parts of our country, who cannot discover relief in one or more of the thirty-five causes for divorce now on the statute books of the states of the Union.

Causes of Divorce

South Carolina has no divorce for any cause.

The following table of causes for absolute divorce and some of the States recognizing each cause is of interest:

(1) Abandonment or desertion—In all except New York, District of Columbia, North Carolina and South Carolina.

(2) Adultery—Sexual Immorality—In all states but South Carolina.

(3) Attempt to take Life—Illinois, Tennessee and Louisiana.

(4) Causes deemed sufficient by courts—Washington.

(5) Civil Death—Rhode Island.

(6) Consanguinity—Pennsylvania, Georgia, Florida and Mississippi.

(7) Crime—Conviction or Imprisonment—All except Maine, Rhode Island, New York, New Jersey, Maryland, District of Columbia, North Carolina, South Carolina and Florida.

(8) Crime against nature—Alabama.

(9) Cruelty—Extreme Cruelty—Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, Delaware, Georgia, Florida, Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, North Dakota, South Dakota, Nebraska, Kansas, Kentucky, Tennessee, Mississippi, Louisiana, Oklahoma, Texas, Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon, and California.

(10) Defects of Disposition—Violent temper—Florida and Kentucky.

(11) Fraud or Fraudulent Contract—Connecticut, Pennsylvania, Georgia, Ohio, Kansas, Kentucky, Oklahoma and Washington.

(12) Fugitive from Justice—Virginia and Louisiana.

(13) Habitual Use of Drugs—Maine, Massachusetts, Rhode Island and Mississippi.

(14) Illegality of Marriage—Bigamy—Pennsylvania, Florida, Ohio, Illinois, Missouri, Kansas, Tennessee, Mississippi, Arkansas, Oklahoma and Colorado.

(15) Illicit carnal intercourse—Maryland, Virginia and West Virginia.

(16) Incapacity to contract Marriage—Mental Incapacity—Georgia, Mississippi, Idaho, Utah and Washington.
(17) Indignities and Defamation—Pennsylvania, Missouri, Tennessee, Louisiana, Arkansas, Wyoming, Washington and Oregon.
(18) Intolerant Religious Belief—New Hampshire and Kentucky.
(19) Intemperance—Habitual Drunkenness—Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, Delaware, Georgia, Florida, Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, Kansas, Kentucky, Tennessee, Alabama, Mississippi, Louisiana, Arkansas, Oklahoma, Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon and California.
(20) Lack of real consent to marriage—Duress or force—Pennsylvania, Georgia, Kentucky and Washington.
(21) Loathsome Disease—Kentucky.
(22) Lewd Conduct—Kentucky.
(23) Misconduct—Rhode Island and Wisconsin.
(24) Neglect of duty—Ohio, North Dakota, South Dakota, Kansas, Oklahoma, Montana, Idaho and California.
(25) Neglect to provide—Maine, Vermont, Massachusetts, Rhode Island, Delaware, Indiana, Michigan, Wisconsin, Nebraska, Tennessee, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, and Washington.
(26) Other causes—Void and voidable Marriages (not otherwise specified)—Rhode Island and Maryland.
(27) Personal unfitness to contract marriage—Impotency—All except Vermont, Connecticut, New York, District of Columbia, South Carolina, Iowa, South Dakota, South Dakota, Texas, Montana, Idaho, and California.
(28) Pregnancy before Marriage—Virginia, West Virginia, North Carolina, Georgia, Iowa, Missouri, Kansas, Kentucky, Tennessee, Alabama, Mississippi, Wyoming, New Mexico and Arizona.
(29) Previous Divorce in Another State—Florida, Ohio and Michigan.
(30) Presumption of Death—Rhode Island and Connecticut.
(31) Refusal to move to State—Tennessee.
(32) Vagrancy—Missouri and Wyoming.
(33) Voluntary Separation—Rhode Island, after ten years; Kentucky, after five years.
(34) Violence endangering life—Pennsylvania, Iowa, Missouri, Kentucky, Alabama and Arkansas.
(35) Want of age—Delaware.

Limited Divorces

Limited divorces or separations from bed and board are granted in Alabama, Arkansas, Delaware, District of Columbia, Georgia, Indiana, Kentucky, Louisiana, Maryland, Michigan, Minnesota (in favor of wife only), Rhode Island, New Jersey, New York, North Carolina, Pennsylvania (in favor of wife only), Rhode Island, Tennessee (in favor of wife only), Vermont, Virginia, West Virginia and Wisconsin.

Children of the Divorced

The United States Census Bureau issued in 1910 a report of the results of a compilation of statistics of divorces granted in the courts in the United States for a period of twenty

years: being from 1887 to 1906, both years inclusive. In the cases included in the report, in 376,694 or 39.8 per cent. of the whole number, there were children of the parties to the divorce, and in 380,608 or 40.2 per cent, no children were reported. In 188,323 cases or 19.9 per cent, no mention was made of children and the presumption is that no children were involved.

Alimony

At least eighteen states have statutory provisions on alimony which make the wife "equally with husband, liable for the maintenance of the minor children, while in others such liability of the wife will attach only where she has been adjudged the guilty party. A few statutes provide that the separate estate of the wife shall be taken into consideration, and that alimony may be refused if she has sufficient property for her needs. A tendency has appeared in the newer legislations to limit the amount which either party may receive to an alimentary pension payable only so long as it may be needed." (29, 151-2.)

A synopsis of the marriage and divorce Statutes of the various states is contained in "The law of Marriage and Divorce" by Frank Keezer, Boston, 1906, pages 193-343.

(4) Employment of Mothers

Diligent search has failed to find a single law in any American state regulating when a pregnant mother shall cease working or how soon she may return to her employment after her child is born. On this subject Professor Stimson writes as follows:

"Now all these laws arbitrarily regulate the hours of labor of women at any season without regard to their conditions of health, and are therefore far behind the more intelligent legislation of Belgium, France, and Germany, which considers at all times their sanitary condition, and requires a period of rest for some weeks before and after childbirth. The best that can be said of them, therefore, is that they are a beginning. No law has attempted to prescribe the social condition of female industrial laborers, the bill introduced in Connecticut that no married woman should ever be allowed to work in factories having failed in its passage." (39.219.)

The following (from the Quarterly Bulletin of the International Labor office) is a fairly complete list of the foreign countries having regulations:

(1) The period in Spain after confinement is from 4 to 6 weeks, and another phrase in the law adds, "A woman in the

eighth month of pregnancy may ask leave to cease work, which shall be granted if medical opinion supports her application." (24.2.20.)

(2) In Austria also a law provides that in stone quarries, lime, sand and gravel pits women who are approaching their confinement shall not be employed. (24.3.139.)

(3) In the German Empire the law provides that women shall not be employed for eight weeks, including the time before and after confinement, and at least six weeks must intervene between childbirth and return to work. (24.3.335.)

(4) In Italy the prohibited period is one month after confinement, and in the rice fields one month before and after confinement. A medical certificate as to the length of pregnancy is required, and the law adds, "It shall be sufficient if such certificates show that the women in question have not yet reached the last month of their pregnancy." (24.1.486, 24.2.580 and 24.3.183-195.)

(5) Following is a list of the countries which prohibit the employment of women after confinement, and the length of the prohibited period.

Denmark—4 weeks, unless by permission of medical officer. (24.1.181.)
Appenzell, Canton of Switzerland, 6 weeks. (24.3.124.)
Argentina—30 days. (24.3.28.)
Berne, Switzerland—from 4 to 8 weeks. (24.3.119.)
Bosnia and Herzgovina—4 weeks. (24.4.7-193.)
Norway—6 weeks. (24.4.346.)
New Zealand—4 weeks. (24.4.30.)
Roumania—3 to 4 weeks. (24.4.46.)

(6) In most of these countries the woman's position must be kept open for her until her return. In most of these cases where the state provides sick insurance, the women are permitted to apply for this assistance during the period of prohibited employment.

(5) En ventre Sa Mere

"A child is the living offspring of human parents either before or after birth. A child *en ventre sa mere* is a child while yet unborn. Although the point was formerly in doubt, it is now settled in this country, that from the time of conception the infant is *in esse*, for the purpose of taking any estate which is for his interest, whether by descent, devise or under the statute of distributions; provided, however, that the infant is born alive, and after such a period of fœtal existence that its continuance in life might reasonably be expected." (2.10.625.) Beck, Medical Jurisprudence, Vol. I, P. 407 (12 ed.), says, "As a general rule, it seems now to be generally conceded that no infant can be born viable, or capable of

living, until one hundred and fifty days, five months after conception. There are however cases mentioned to the contrary. In such cases we should recollect that females are liable to mistakes in their calculations and that conceptions may take place at various times during the menstrual intervals, and thus vary the length of gestation. Such early births are at the present day very generally and very properly doubted. . . . We may . . . . . conclude that between five and seven months, there have been instances of infants living, though most rare; and even at seven, the chance of surviving six hours after birth is much against the child," and see Chitty, Med. Jur. 406. On the other hand, by statute, a child born ten months after the death of the father comes within the rule. Massie v. Hiatt, 82 Ky., 314. (11.10.626.) See also "(7) Birth." The divorce libel of Schwartz v. Schwartz now pending in Boston, Suffolk County, Massachusetts, is remarkable. The libellant, the wife, in petitioning for the dissolution of the marital tie also requests the Court to grant her the custody of her unborn child.

(6) Abortion

"Abortion is defined to be the delivery or expulsion of the human fœtus prematurely, or before it is yet capable of sustaining life. . . . The defendant's intent to cause or produce an abortion controls and constitutes an essential element of the offense." (11.1.170.) At common law it is a criminal offense to cause or procure an abortion upon a woman who has become quick with child, but as to whether a common law offense is committed by causing or procuring, with the consent of the woman, an abortion before such a quickening, there is a conflict of authority. To the effect that such an abortion constitutes no criminal offense are the following authorities:

Iowa—Hatfield v. Gano, 15 Iowa, 177; Maine—Smith v. State, 33 Me., 48; Maryland—Lamb v. State, 67 Md., 524; Massachusetts—Com. v. Bangs, 9 Mass., 387; Michigan—People v. McDowell, 63 Mich., 229; New Jersey—State v. Cooper, N. J. L., 52; New York—Evans v. People, 49 N. Y., 86.

But contra, see the following cases:

Arkansas—State v. Reed, 45 Ark., 333; North Carolina—State v. Slagle, 83 N. C., 630; Pennsylvania—Mills v. Com., 13 Pa. St., 631.

"Quick with child" and "with quickchild" are synonymous terms. The words "big" and "great" are tantamount to the word "quick." In Evans v. People, 49 N. Y. 86, 90, Allen, J., says: "Quick is synonymous with 'living', and both are

the opposite of 'dead.' The woman is not pregnant with a living child until the child has become quick. If the child is a living child from the instant of conception, then all the authorities, medical and legal, are sadly at fault in their attempts to distinguish between mere 'pregnancy' and 'pregnancy with a quick child,' and legislators have been laboring under the same hallucination in legislating upon the subject for all the acts passed in reference to abortion in this country and in England recognize the fact that the child does 'quicken,' that is, becomes endowed with life, at a certain period, longer or shorter, after conception, and that there is a period during gestation when although there may be embryo life in the fœtus there is no living child. And to the same effect see Smith v. state, 33 Me., 48; Com. v. Parker, 9 Met. (Mass.), 263. (11.1.172.) Dwight in his Medical Jurisprudence writes "By the term quickening are described certain peculiar sensations usually noted by the mother at about four and one-half months following conception." (12.147.) To many, the better rule would be that of the Catholic Church, namely, that there is life "*ipso momento conceptionis*" and that an abortion even then is murder. The woman on whom the abortion is produced is not a principal. In some states, however, by statute, the woman is made punishable; but her offense is separable from that of the person administering the drug or performing the operation. But in Smith v. Gaffard, 31 Ala., 45, it was held that a statute prohibiting the administration by any person, to a pregnant woman, of any drug or substance with intent to procure her miscarriage, does not make it an offense for a woman to take a drug with intent to produce a miscarriage. (11.174.) Section 15 Chap. 212, Revised Laws of Massachusetts provides that whoever administers, advises, prescribes, aids or assists in an abortion shall, if the woman dies, be punished by imprisonment in the state prison for not less than five nor more than twenty years; and if the woman does not die, by imprisonment in the state prison for not more than seven years and by a fine of not more than two thousand dollars. Massachusetts and other states have provided penalties of "three years imprisonment and a fine of not more than a thousand dollars for advertising, giving or conveying any notice, hint or reference to any person, or to the name of any person, from whom, or to any place where anything or means whatever, or any advice or knowledge, may be obtained for the purpose of causing or procuring the miscarriage of a woman pregnant with child." (Mass. Revised Laws—Chap. 212—Sec. 16.)

(7) Birth

Continuing the subject treated under topic (5) *En ventre sa mere*, as to the degree of life necessary for inheritance Dwight says: "Modified by certain conditions, that will be spoken of later, a child whether of full term or not, whether or not affected by disease or conditions which make it impossible that life shall be prolonged, providing there is evidence of life, is capable of inheriting. It is not necessary that respiration should be established. It is not necessary that the child should cry. Neither is it necessary to prove that a complete, independent circulation was established. Pulsation of the umbilical cord after delivery, a slight active motion in one of the extremities, or pulsation in an artery, is in itself proof of life to a sufficient extent for the purposes of inheritance. It is usually necessary to demonstrate that complete birth has taken place. Some, however, have held that the partial birth of a living child is all that is necessary. Such rulings, however, have been contradicted, as they bring up rather difficult questions as to the extent of birth necessary to inherit. Crying and respiration may occur before birth is complete, but this evidence is of doubtful value." (12.198.)

"Not a single state, not even a single city, in the entire United States possesses complete registration of births. Boston claims to have about the best, only 96 per cent. . . The era of modern sanitary civilization may be marked by the dates upon which various countries began to record infant mortality. Some countries—China, Turkey and the United States—even yet possess no records of infant mortality. Unless the American people wake up, China and Turkey will have satisfactory data for infant mortality long before the United States. . . The omission of the United States from the international data for births is on account of our almost entire lack of effective birth registration.

"Talk about the registration of births in the United States. Why for not more than one-half (55.3 per cent) of the total population of the United States is there even fairly accurate registration of deaths alone. Many states—practically the entire South—make no more records of the deaths of their citizens than if they were cattle; not even so much, for blooded cattle have their vital events recorded, while human beings are thrown into their graves without a trace of legal registration. And even the states that have fairly good registration of deaths, and that have had such registration for many years, grossly neglect the equally important, or even more important, registration of births. . . Our native born children of native parents are as worthy of protection as the children of any other country, and the children born to foreign parents

in this country should have the same safeguard as about their cradles as if they had been born in a foreign land. America should not mean barbarity in its relation to infant life. The ægis of protective civilization should rest upon the infant of American birth, and a proper record be made of the vital events of his life for his personal protection, legal use and for the most important sanitary information which can alone be obtained from such records." (Dr. Cressy L. Wilbur, in Report of the Committee on Birth Registration. Proceedings of The American Association for Study and Prevention of Infant Mortality, Johns Hopkins University, Baltimore, November 9-11, 1910.)

(8) Midwives

In the following states midwives are examined and licensed by law:—Connecticut, District of Columbia, Illinois (violators prosecuted) Indiana, Minnesota, Missouri, New Jersey, Ohio, Wisconsin and Wyoming (practice exempted in cases of emergency). The practice of midwives is exempted in Arizona, Arkansas, Idaho, Kentucky, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Virginia and West Virginia. The states having "no law" regulating the practice of midwives are Alabama, California, Colorado, Delaware, Florida, Georgia, Iowa, Kansas, Louisiana (law does not apply to midwives in rural districts and plantation practice), Maine, Massachusetts, Michigan, Montana, Nebraska, Nevada, New Hampshire, New Mexico, New York, North Dakota, Oregon, Pennsylvania, Rhode Island, South Dakota, Tennessee, Texas (no specific law, examination provided for those who wish to practice obstetrics alone). The act "does not apply to those who do not follow obstetrics as a profession, and who do not advertise themselves as obstetricians or midwives, or hold themselves out to the public as so practicing," Utah (no specific law. Those desiring to practice obstetrics are examined and licensed, but the law permits practice "in case of emergency," and it exempts "persons practicing obstetrics in communities where there are no licensed practitioners"), Vermont and Washington. (23.103-431.)

(9) Infanticide

By infanticide is understood "the destruction of life in newborn children." The law assumes, as a rule, that an infant whose dead body was found was born dead unless proof is brought that the opposite is the case. This crime is one of the most common among all nations, especially among the poorer classes, and these problems are very frequently presented for medico-legal investigation. There are three questions

which are perhaps of the greatest importance in connection with them. Under the English as under that of most nations, the crime of murder does not vary, and is subject to the same punishment whether the victim is an infant or of more mature age. It is treated under a different heading in works on legal medicine, as it presents different problems for solution. The law requires that it should be proved:

1. That sufficient uterine age and development has been reached to allow of a separate existence on the part of the child.
2. That the child was born alive.
3. Proof of the manner of death. (12.173.)

(10) Prevention of Blindness

Connecticut, Illinois, Indiana, Maine, Maryland, Massachusetts, Michigan, Missouri, New Jersey, New York, Ohio, Oregon, Pennsylvania, Rhode Island, Tennessee, and West Virginia have laws requiring cases of ophthalmia neonatorum to be reported. In Connecticut midwives and nurses are liable to a fine of $200 or imprisonment not to exceed six months, or both, "Should one or both eyes of the baby become inflamed, swollen or reddened at any time within two weeks after birth and the midwife or nurse fails to report in writing within six hours to health officers or legally qualified practitioner of city, town or district where parents reside that such inflammation, etc., exists." Minnesota requires the parent as well as the nurse and midwife to report within twelve hours to local health officers if one or both eyes of an infant, under two months, become inflamed, reddened and diseased. Ohio has a law making the treatment of ohpthalmia neonatorum by midwife or general practitioner without notifying an occulist or sending the child to a hospital, a misdemeanor with a heavy fine and an imprisonment clause. Unfortunately the law is reported as "not operative." (43.52.2047-2056.)

(11) Vital Statistics

The American Medical Association Bulletin, Vol. 6, No. I, September 15, 1910, contains a model bill on vital statistics patterned, in the main, after the Pennsylvania law. (42.) Section 6 requires that stillborn children or those dead at birth shall be registered as births and also as deaths. Midwives, under this model bill, are not allowed to sign certificates of death for stillborn children. Section 13 provides that the physician or midwife, "and if there be no attending physician or midwife, then it shall be the duty of the father or mother of the child, householder or owner of the premises, manager

or superintendent of public or private institutions in which the birth occurred, to notify the local registrar, within ten days after the birth, of the fact that a birth has occurred." Section 21 makes failure to register cause of death, false certification of cause of death and failure to file a proper certificate of birth misdemeanors punishable by fines of from five to two hundred dollars. This model bill has become the law of some twenty states, and has been endorsed by the following: The Census Department, Department of the United States Government, the American Medical Association, the American Bar Association, the American Association for the Study and Prevention of Infant Mortality and in 1910 by the general officers of the American Federation of Labor." Registration of births, is urged, as "a necessary part of any plan for the study of infant mortality, because without such registration we have no means of ascertaining definitely the relation between the annual death rate and birth rate. In other words it enables us to find out where we are. It is an essential part of any plan for the reduction of infant mortality because the prompt registration of births increases the possibility of preventing certain infantile diseases and blindness. The registration of births is also of the utmost importance for legal reasons, as a means of establishing the identity of the individual." (Leaflet issued by the American Association for Study and Prevention of Infant Mortality, September 1, 1910.) When it is remembered that Bulletin 104 of the year 1909 of the United States Bureau of Census shows that the death of babies less than a year old constitutes one-fifth of our total mortality, it would seem that even the most indifferent and the laziest will not begrudge the effort necessary to record the child's entrance into and his departure from this world. Yet so much notice is denied to the child in too many states.

(12) Legitimacy and Illegitimacy

Under the common law only the child born in wedlock was legitimate. The Canon law, which is the law of the Church, decreed that the child born before the marriage became legitimate on the marriage of the parents, and as "Canon law lies at the base of much American law" (27.356), the rule has come to be universal in the United States that a child whose parents marry after its birth, no matter how long (39.140), becomes legitimate. So also, a child is legitimate when born within a competent time after the termination of marriage by death or divorce (11.5.525). And finally most of our states consider that a child, born during a void marriage

entered into in good faith, is legitimate. Of course even the child born during marriage may be shown to be illegitimate and it must be remembered that any legal presumption of legitimacy stands only until the contrary is shown. However, our courts have placed the burden of proof on the one alleging illegitimacy and on the grounds of public policy and decency ordinarily will not allow any father or mother to testify that a child, presumed to be legitimate, is, as a matter of fact, illegitimate. Thus far it will be noted that marriage controlled legitimacy. But our legislators have conceived or known of situations where the father of an illegitimate child might not want or be able to marry the mother but was anxious to remove the stain of illegitimacy from the child. Such a legal process is called legitimation, and differs from adoption which usually refers to strangers in blood. Professor Stimson's American Statute Law reads: "In several states, the father of an illegitimate child, by publicly acknowledging it as his own, receiving it as such (with the consent of the wife, if married) into his family, and otherwise treating it as legitimate, thereby rendered it legitimate for all purposes"—at least in California, Nevada, Dakota and Idaho. (37.756.) "In several states, the putative father (if he was unmarried at the birth of the illegitimate child) has a process in court by which he might legitimate the child"—in North Carolina, Tennessee, Georgia, New Mexico, Alabama and Mississippi. (37.757.) In 1887 Maine enacted the law that an illegitimate child is heir if the father adopts him into his family, or in writing makes acknowledgment that he is the father before a justice or notary; and he inherits from the kindred of such father, whether lineal or collateral, and they from the child, as if legitimate: Maine 1887, 14. (38.98.) Massachusetts permits the father to adopt his illegitimate child with the consent of its mother, and thereby make it his heir. This is considerable progress since "all the earls and barons answered with one voice that they would not change the laws of England." (39.40.) Florence Kelley in 1882 in commenting on the changes in the legal status of the illegitimate child since Blackstone, wrote: "So far is his condition assimilated to that of the legitimate child that the statement is now true that the chief legal disadvantage of the illegitimate child is his inability to inherit." (26.96.) The mother has a superior right to the custody of her illegitimate child but she may lose her right by abusing or neglecting the child. The putative father seems to be entitled to the custody against all but the mother. However, the best interests of the child will be the controlling factor in deciding the question of custody in any court. (11.5.637.) The statutory liability of

the putative father for the support of the legitimate child is to-day universal. Alabama, Georgia, Illinois, Indiana, Maine, Massachusetts, Michigan, New Hampshire, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina and Wisconsin authorize their courts to imprison the putative father as one means of enforcing an order for the maintenance of the illegitimate child. (11.5.670.)

(13) Milk Laws

Dr. Henry L. Coit, of Newark, New Jersey, seems to have been the first to urge legislation "on the subject of milk production designed for clinical purposes." Abandoning the effort to get a state law on this subject Dr. Coit organized a Medical Milk Commission which worked independently of state authorities as a professional body and from year to year his plan was duplicated in various parts of the country until now there are seventy-two such Milk Commissions. In many instances these commissions have started a crusade through municipal activities for the improvement of the general supply of milk. These commissions are professional bodies without pecuniary interests or commercial relations with the production of milk and have as their general object, the obtaining of milk suitable for sick-room purposes and infant feeding. The Medical Milk Commissions has been recognized by the Government through the Departments of Agriculture and the Marine Hospital Service, both departments having issued bulletins on the history of the "Pure Milk Movement." Four years ago, the Medical Milk Commissions then at work (of which there were only twenty-two) were federated for the purpose of extending the propaganda and influencing the organization of this movement in other centres of population. This work has been carried on from the office of the Secretary of this federation, by Dr. Otto P. Geier, of Cincinnati. Both Dr. Coit and Dr. Geier insist that "certified milk has a definite meaning as outlined in the plans for the original Commission and it has not only received federal recognition but in three states has been protected by law." These three states are Kentucky, New York and New Jersey, and the Michigan legislature has a similar bill before it for passage. The New Jersey Law as the law of the state in which certified milk had its origin, is considered the most comprehensive and is entitled "An Act providing for the incorporation of medical milk commissions and the certification of milk produced under their supervision. "This act will be found in State of New Jersey Laws of 1909. Four sections of this law follow:

"8 Every such association shall have power to enter into agreement in writing with any dairyman or dairymen for the production of milk under the supervision of such association for the purposes enumerated in section one hereof and to prescribe in such agreement the conditions under which milk shall be produced, which conditions, however, shall not be below the standards of purity and quality for 'Certified Milk' as fixed by 'The American Association of Medical Milk Commissions,' and the standards for milk now fixed or that may hereafter be fixed by the Board of Health of the State of New Jersey. In any contract entered into by any such commission with any dairyman or dairymen, it may be provided that such medical milk commission may designate any analsyts, chemists, bacteriologists, veterinarians, medical inspectors or other persons who in its judgment may be necessary for the proper carrying out of the purposes of such commission for employment by such dairyman or dairymen and to prescribe and define their powers and duties, and that such persons so employed by such dairyman or dairymen may be discharged from employment whenever such medical milk commission may request such discharge or removal in writing.

"9. All containers of any kind or character used in the carrying or distribution of milk produced by any dairyman or dairymen under contract with any medical milk commission shall have attached thereto or placed thereon a certificate or seal bearing the name of the Medical Milk Commission with which such dairyman or dairymen producing such milk shall be under contract, which certificate shall have printed, stamped or written thereon the day or date of the production of the milk contained in any such container and the words 'Certified Milk' in plain and legible form.

"10. The work and methods of any Medical Milk Commission organized under this act and of the dairies on which milk is produced under contract with any such commission shall at all times be subject to investigation and scrutiny by the Board of Health of the State of New Jersey. The Secretary of said State Board of Health shall be an ex-officio member of every milk commission organized under this act.

"11. No person, firm or corporation shall sell or exchange or offer or expose for sale or exchange as and for certified milk, any milk which is not produced in conformity with the methods and regulations prescribed by and which does not bear the certification of a medical milk commission incorporated pursuant to the provisions of this act or organized or incorporated in some other state for the purposes specified in section one hereof, and which is not produced in conformity with the methods and regulations for the production of certified milk from time to time adopted by the American Association of Medical Milk Commissions, and which is below the standards of purity and quality for certified milk as fixed by the American Association of Medical Milk Commissions; and any such person, firm or corporation violating any of the provisions of this section shall be guilty of a misdemeanor."

The Milk Commission appointed by the Mayor of Philadelphia enumerates the essential points (see The Worcester Gazette, Saturday, March 18, 1911).

"Of course, pure milk—comparatively speaking—is to be had. But as a rule there is a menace all along the line.

"Take, for instance, the farm where milk is produced. Unless modern and improved sanitary principles are enforced, the beginning of the danger is right there.

"Then comes the railroad journey to the city.

"Next the handlers come in and eventually the milk is served at the home.

"Now there is not a step from farm to customer that is not of the highest importance to guard.

"The cow must be milked by cleanly hands in a cleanly place.

"The milk must never for a moment be exposed to unsanitary conditions, for milk is a tremendous absorbent of everything that is impure.

"It must be sent to railway station in a cooled condition, and it must be transported to the city platform in cooled cars.

"The dealer must transfer the cans in wagons that will maintain the low temperature.

"Finally the milk must be delivered in a cooled state, Then it is up to the housekeeper to see to it that the bottles shall be placed in iced receptacles.

"To put it briefly, milk must be under constant supervision and direction and control from the time the cow yields her milk to the time of delivery to the purchaser.

"That is the problem that confronts not only the commission but City Councils and the Legislature. For there must be hearty co-operation from start to finish.

"When we can have milk under such constant inspection we shall be sure of having a pure supply. And that is precisely what we must have. No matter what the cost is, we must have it."

"True, Pure Milk at any cost. Every baby in every home throughout the country demands it, and when the King commands his subjects must obey. But more than that the public health and posterity demand it."

The Report of the United States Commissioner of Education for the year ending June 30, 1910, Vol. I, at page 141, says that "in order to provide a supply of pure milk, cream, and butter for pupils who procure luncheons at the schools, the St. Louis School board prepared for the year 1909-10 a special contract embodying such sanitary precautions as they thought necessary to insure purity in the dairy products supplied." (44.1.141.) If the St. Louis plan is copied generally throughout the country the movement for pure milk is destined to be successful at an earlier date than has been expected.

(14) Compulsory School Attendance Laws

The statutory provisions relating to compulsory education and child labor throughout the United States are compiled in the Report of the United States Commissioner of Education for the year ending June 30, 1910, Vol. I, pages 148-153 inclusive, and in Monroe's Cyclopædia of Education, Vol. I, pages 289-93 inclusive. The Cyclopædia contains an excellent article of about ten pages on "Compulsory Attendance" by Dr. David Snedden, Massachusetts Commissioner of Education. Recourse should be had to Dr. Snedden's article for much information that cannot be condensed into the space assigned to the subject in this paper. The compilations mentioned show that Alabama, Florida, Georgia, Louisiana, Mississippi, South Carolina and Texas have no compulsory education law. In North Carolina and Tennessee legislation

applies only to certain sections, and in Virginia "compulsory attendance law is optional with the voters of any county, city or town (36.1.293), with these exceptions: "A. Throughout almost the entire United States some school attendance is compulsory from 7 or 8 years of age to 14. B. Massachusetts, New York, Idaho, New Hampshire and others require certain educational qualifications, otherwise attendance is compulsory to 16. The 1908 law of New Jersey sets an upper limit of 17 for all who have not completed the eight grades; those finishing the elementary school course may not leave until 15. C. A number of states require, especially in cities, that children under 16 must attend school regularly unless definitely employed. Illinois, Maryland, Pennsylvania, and Missouri (St. Louis and Kansas City only) are examples. D. Laws on compulsory education have frequently been nullified because the amount of attendance each year was not specified, and consequently evasions were easy. Even yet some states prescribe a minimum amount, *e. g.*, Iowa, 16 consecutive weeks; Missouri (outside of St. Louis), not less than half the term; Nebraska, two thirds of term. The majority of states having well-developed legislation now making attendance obligatory for the entire term during which school is in session. E. Recently special legislation in some states provides for compulsory attendance from 8 to 20, at State School for Deaf. Nebraska, Minnesota, and North Carolina (for whites), have somewhat similar legislation. In early stages poverty of parents paved the way for exemptions, but the modern tendency is away from this. Many states provide for supplying free books to needy children. In Ohio and Colorado boards of education must give aid in clothing where it is necessary. In some large cities philanthropy has secured the provision of scholarships for those whose parents need aid in keeping children at school." (36.1.293.)

The maximum penalty on parents for neglect to comply with the compulsory education law is as follows:

Delaware, first offense: $2 or 2 days imprisonment, subsequent offenses: $5 or 5 days imprisonment; Connecticut, $5 for each week's absence; Maryland $5; Pennsylvania, first $2, subsequent $5; West Virginia, first $2, subsequent $5; Virginia, first $10, subsequent $20; District of Columbia, Illinois ("and stand committed until paid"), Iowa, Massachusetts, Montana, New Hampshire, North Dakota, Ohio, Rhode Island, South Dakota ("costs and stand committed till paid") fall within the group authorizing the imposition of a fine of $20. In Kentucky the delinquent parent can be fined for the first offense $20 and $50 for subsequent offenses. The $25 group includes Arizona, Arkansas, Colorado, Kansas,

Nebraska, North Carolina, Vermont, Washington and Wyoming. Nevada has a penalty of $100 for the first and $200 with costs for subsequent offenses. The states where parents can be sentenced to imprisonment are New York, which has a provision for five days or $5 for the first offense and 30 days and $50 for subsequent offenses; Missouri, 10 days and $25; New Mexico, 10 days or $25; Oregon, 10 days and $25; California, 25 days and $50; Maine, 30 days or $25; Minnesota, 30 days or $50; Indiana, 90 days and $25; Michigan, 90 days and $50; Wisconsin, 3 months and $50; and Idaho judges can make stubborn parents take notice by imposing a sentence of 6 months and a fine of $300.

"The American states are obviously moving toward certain standards in compulsory attendance which will partly depend upon development of additional school facilities. For example, child labor legislation is increasingly closing up industries to youths under 16. The raising of educational standards will compel many children to attend school until they are 16. The state will provide for those who are demonstrably needy, rather than allow dependent parents to withhold from children their educational heritage. The increasing appreciation of the need of vocational education will result in the provision of special school facilities for imparting either the whole or part of this education. It is not improbable that the advanced position of Germany in this respect (*i. e.* compelling children from fourteen to eighteen to give part time to continue education of a vocational or other character), will be imitated. Special schools will be provided for defectives and delinquents, and attendance at these made obligatory. Ultimately a complete system of registration of all children must be provided, to be carried on by attendance officers, and centralized in each limited school area, not only for the enforcement of attendance but for obtaining compliance with child labor legislation, and the provision of medical or other aid." (36.1.295.)

(15) Truancy

In the last section we saw that a parent, whose child does not attend school as required, may be fined and imprisoned in most states. And the law usually states the minimum amount of the child's absence that will make the parent liable. In Massachusetts every person, who fails to cause a child under his control to attend school for five day sessions or ten half day sessions within any period of six months, is liable to a fine of not more than twenty dollars. An "Attorney General of New York has ruled that more than two unexcused absences in four consecutive weeks constitute a violation of the law" (4.190), for which the parent can be fined and imprisoned.

Concerning the prosecution of parents, Bardeen's School Law says: "A child should not be arrested unless an *habitual* truant or disorderly and insubordinate while in attendance at school. Frequently parents are only too glad to have their children committed as truants and cared for at town or county expense until they are permitted by law to go to work. The most direct and effective method of reaching parents and forcing upon them the duty of keeping their children in school is by penalizing the parent as provided in the statute. Where parents are prosecuted the most, truancy exists the least." (4.191.) Massachusetts and other states provide that "whoever induces or attempts to induce a child to absent himself unlawfully from school, or employs or harbors a child who, while school is in session, is absent unlawfully from school, shall be punished by a fine of not more than fifty dollars."

The law makers of our states passed through childhood before they were called to serve as legislators. Some of them will acknowledge that the truant schoolboy has become the able legislator. Realizing that the majority of truants do not take their parents into their confidence when "playing hookey," the members of our legislatures have also enacted laws relative to habitual truancy. And provision has been made for boarding truant schools, sometimes called "Training Schools," to which *only* habitual truants, habitual absentees and habitual school offenders are committed by our courts. The inmates of our boarding truant schools are usually children that have got beyond the control of their parents or those that come from "broken homes." The child must be discharged from the boarding truant school upon becoming sixteen years of age. Dr. Snedden believes that "much good legislation relating to children breaks down because of poor machinery of enforcement. In Connecticut there is a state agent with assistants who attends to the execution of laws on compulsory education and child labor. In all other states the enforcement of the law is local. In nonurban areas school boards and local constables are authorized to proceed against parents failing to keep children in school; in cities it is now common to constitute special attendance officers with limited police powers. Most of this machinery is yet very defective." (36.1.293.) He maintains that four different types of special class or school are necessary in any city to procure the adequate carrying out of the law. (a) Those pupils who have become quite incorrigible, and whose parents have lost control of them, must be sent to an institutional school, committed for a term of years. Only thoroughgoing reform is adequate. (b) A day truant school, where hours are long and manual work abundant. This school,

while allowing pupils to sleep at home, should aim primarily to keep them off the street and away from contagion of bad company. Such schools do not exist in American, but are found in English cities. (c) Special classes should be provided for pupils who cannot easily be brought under the ordinary school discipline. These classes may have the same programmes as the ordinary classes, but should be under charge of teachers of sufficient maturity, experience, and personal character to cope with this type of child. (d) Possibly a fourth type of class should be for those who by irregular attendance have hopelessly fallen away from the regular class attainments." (36.1.294). Some states by legislation make the parents in part responsible for the support of their children in truant schools.

(16) Medical Inspection of Schools

The legal aspects of medical inspection of schools is treated in Chapter II, "Medical Inspection of Schools" by Gulick and Ayres. (16.159.183.) The statutes cited by Gulick and Ayres were those in operation about the year 1908. At the time "Medical Inspection of Schools" was written, Massachusetts had the distinction of being the only state in the Union having a "mandatory medical inspection law." (16.159.) By a mandatory medical inspection law is meant a law enacted by the state legislature whereby cities and towns are compelled to provide for medical inspection in their schools. Under date of March 7, 1911, Dr. Ayres writes: "Legal provision is made for Medical Inspection in thirteen states and in the District of Columbia. Four are compulsory laws. They are the laws of Colorado, Massachusetts, New Jersey and Indiana. In the last state the law refers to Indianapolis only. Permissive laws exist in California, Connecticut, Maine, New York and the District of Columbia. Permissive laws applying to cities exist in Ohio and Washington. Laws applying to sight and hearing are in force in Louisiana, Vermont and Virgina."

The abstracts of the Medical inspection laws that follow are, in the main, taken from a forthcoming paper on Medical Inspection of Schools," by Mr. George H. Shafer, of Clark University:

Colorado. The responsibility here rests with the teachers, they note defects and inform the principal, who notifies parents. Parents are compelled to have the child examined; if they neglect, they are turned over to the Bureau of Child and Animal Protection for prosecution. If parents are indigent, the child is referred to the county physician.

Massachusetts. The school Committee of every city and town in the commonwealth shall appoint one or more school physicians, shall assign one to each public school within its city or town, and shall provide them with proper facilities for the performance of either duties as prescribed in this act, and shall assign one or more to perform the duty of examining children who apply for health certificates in accordance with this act; provided, however, that in cities wherein the board of health is already maintaining or shall hereafter maintain substantially such medical inspection as this act requires, the board of health shall appoint and assign the school physician. Every school physician shall make a prompt examination and diagnosis of all children referred to him, and such further examination of teachers, janitors and school buildings as in his opinion the protection of the health of the pupils may require." Teachers make examinations of eyes and ears. The statutes provide First, for a general examination of all the children in the public schools at least once a year for any defect or disability tending to interfere with their school work. Second, for a special examination of children (a) who show signs of being in ill health or of suffering from infectious or contagious diseases (b) who are returning to school after absence on account of illness or from unknown causes, also the examination of pupils who apply for health certificates. The school committee shall notify parents of all defects found.

New Jersey. "Every board of education shall employ a competent physician to be known as the medical inspector and fix his salary and term of office." Every board of education shall adopt rules for the government of the medical inspector which shall be submitted to the State Board of Education for approval."

The medical inspector shall examine every pupil, to learn whether any physical defects exist, and keep a record from year to year of the growth and development of such pupil, which record shall be the property of the Board of Education, and shall be delivered by said medical inspector to his successor in office. Said inspector shall lecture before the teachers at such times as may be designated by the Board of Education, instructing then concerning the methods employed to detect the first signs of communicable disease, and the recognized measures for the promotion of health and the prevention of diseases. The law also compels parents to remedy defects. It went into effect April 13, 1909.

California. The Training School for September, 1910, published at Vineland, New Jersey, has an article on "Health and Development Supervision in California." On pages

248-9 one reads, "Mr. George L. Leslie, director of the medical inspection of the Los Angeles schools, who is chiefly responsible for the passage of the law, summarizes its provisions as follows:

"1. The establishment (under the direction of boards of educaton or boards of school trustees) of annual physical examinations of school pupils and a follow-up service to secure the correction of defective development, thus maintaining continuous health and growth supervision of children and youth. "2. The requirement of physical examination of all candidates for teachers' positions in the public schools to determine vitality and efficiency and make possible further examination of teachers as may be advisable to determine continued fitness for work, and to determine the amount of work to be required of the teaching force of the schools consistent with efficiency and continued service. "3. The adjustment of school activities to health and growth needs and development processes of pupils. "4. The special study of mental retardation and deviation of pupils in the schools. "5. Expert sanitary supervision. "6. It provides for a class of educators—experts in physiology, hygiene, and practical psychology—who can skillfully diagnose defective growth and development, and take more intelligent steps to grow children and youths. It provides for the co-operation of this class of educators and all educators with skilled physicians."

New York provides for the medical inspection of all children in attendance upon schools under their supervision, whenever in their judgment such inspection shall be necessary, and to pay any expense incurred therefor out of funds authorized by the voters of the district or city or which may properly be set aside for such purpose by the common council or the board of estimate and apportionment of a city. (Subd. Added by L. 1910, chap. 602.)

Ohio has a law as follows: Section 7692. Any board of education in a city school district may provide for the medical inspection of pupils attending the public schools. For that purpose it can employ competent physicians, nurses, and provide for and pay all expenses incident thereto from the public school funds, or by agreement with the board of health or other board or officer performing the functions of a board of health for such city. It may provide for medical and sanitary supervision and inspection of the schools which are under the control of such board of education and of the pupils attending such schools, by a competent physician selected by the parent or guardian of the child, but on failure of the parent or guardian, then by the district physicians and other employee to be appointed by such board of health. (R. S. Sec. 4018a.)

The District of Columbia has a permissive law. State of Washington has a permissive law for districts of first class.

In 1907 *Connecticut* passed a law authorizing the board of education or town committee of any town, or the board of education or committee of any school district to appoint one or more school physicians.

The school physician is to examine all pupils referred to him by principals, and teachers, janitors and school buildings as in his opinion the protection of the health of the pupils may require." The law further says: "The school authorities of any town or school district which has appointed a school physician in accordance with the provision of this act shall cause every child attending the public schools therein to be separately and carefully tested and examined at least once in every school year to ascertain whether such child is suffering from defective sight or hearing, or from any other physical disability tending to prevent such child from receiving the full benefit of school work, or requiring a modification of such school work in order to prevent injury to the child or to secure the best educational results. Notice of defects of diseases are to be sent to parents with such advice or order relating thereto as the physician may deem advisable." Provision is also made for the employment of *school nurses.*

The law of Maine is largely copied from that of Massachusetts. It differs in that it is permissive in case of the town. And further the following articles make it altogether permissive.

Expenses which a city or town may incur by virtue of the authority herein vested in the school committee shall not exceed the amount appropriated for that purpose in cities by the city council and in towns by a town meeting. (March 16, 1909.)

Further the law of Maine makes no mention of examination for employment certificate.

Utah has a law as follows: Board of Health has jurisdiction in matters pertaining to health in schools. The local boards of health shall have jurisdiction in all matters pertaining to the preservation of the health of those in attendance upon the public and private schools in the state, to which end is hereby made the duty of each of the local boards of health.

1. To exclude from said schools any person, including teachers, suffering with any contagious or infectious disease, whether acute or chronic, or liable to convey such disease to those in attendance.

2. To make regular inspection of all school buildings and premises, etc.

Vermont has a law requiring inspection of eyes and ears by teachers.

It will be noted that a penal provision applying to neglectful parents of defective children is mentioned as occurring in the laws of Colorado and New Jersey. This penal provision is endorsed by many, if not all, of those in sympathy with medical inspection of schools—Also Connecticut authorizes

the employment of school nurses. Relative to the school nurse, Gulick and Ayres say:

"Dr. S. W. Newmayer, of Philadelphia, terms the school nurse 'the most important adjunct to medical inspection'." Dr. John J. Cronin, of New York, in writing of the work of the school nurse says: "It is most highly endorsed by teachers, principals, educators, parents, and children. Since this innovation many cities throughout the world have copied our nursing system as far as possible, up to the standard set by this city." Dr. Ernest J. Lederie, formerly Commissioner of Health of New York City, says, "The school nurse has been voted a success from the day she began work." Dr. Walter S. Cornell says of the school nurses in Philadelphia, "As a rule, in the foreign, poverty stricken sections they are invaluable." Dr. Thomas F. Harrington, Director of the Department of School Hygiene of Boston, writes, "It does not seem possible to conceive a more satisfactory arrangement or a more effective piece of school machinery than the school nurse under school supervision."

"Citations from the best authorities on the subject, similar in tone to those quoted, might be indefinitely multiplied. It may be said, indeed, that there is no division of opinion on the subject. The leading authorities without exception advise and recommend school nurses in connection with the work of medical inspection" (16. 66). Dr. John J. Cronin, Assistant Medical Inspector of the New York City Board of Health, is of the opinion that there should be one medical inspector and one nurse for each two thousand pupils" (16.143). As to Dr. Cronin's right to speak on this question, Gulick and Ayres write, "Dr. John J. Cronin, of New York City, has made most wise, extensive, able and best known medical inspection from the standpoint of education" (16.6). New York pays its nurses $75 per month and employs them for twelve months in the year. Boston pays the supervising nurse $924 for the first year, which is increased by an annual increment of $48 to a maximum of $1,116. The assistant nurses receive $648 per year and an annual increase of $48 until the maximum of $840 is reached. New Haven pays its nurses $600 per year" (16.143-4). A very interesting and instructive "table collected by the bureau of municipal research of New York City, April 1, 1910, and intended to show what school authorities are doing to promote the physical welfare of school children in cities having a population of 8,000 or more," appears in the Report of the U. S. Commissioner of Education for 1910, Vol. 1, pages 141-7. In the same volume at pages 140-1 "Dental Inspection in the Cleveland Public Schools" is mentioned. The final paragraph reads "As a result of the

investigation the board of education accepted a proposition of the Cleveland Dental Society to conduct gratis for the year 1910 the following work: To make one dental examination of all pupils in the public schools within the year; to establish for the year four centrally located clinics for the treatment of the indigent poor; and to conduct a series of practical and illustrated talks on oral hygiene." The Statute Laws on the Practice of Medicine in all states are complied in "Legal Medicine and Toxicology" by R. L. Emerson, M. D., New York, 1909.

(17) Laws for Child Protection

(1) *Societies.* Under this topic, after glancing at the organized movement for the prevention of cruelty to children, some of the laws for child protection will be considered. To any one at all acquainted with the vast amount of legislation on even "the neglected child," no excuse will be required for the omission of much important legislation in a paper of this kind. And as the scope of the topic—Laws for Child protection—is broader than commonly understood from the words: "neglected child," it follows that only the broken and disjointed outlines of the topic can be here sketched.

"The Humane Movement" by Roswell C. McRea, of Columbia University, contains a "Summary of State Laws for the Protection of Children" (31.389-431). Chapter V in the same work (31.135-146) gives much valuable information relative to the organized movement for the prevention of cruelty to children. Societies for the Prevention of Cruelty to Animals were organized in 1866, eight years before similar societies for children were formed.

"In 1874, the officers of the American Society for the Prevention of Cruelty to Animals were confronted with a case of cruelty to a child. This little girl, Mary Ellen, had been daily beaten by a stepmother and tormented in other cruel ways. The attention of charitable people was called to Mary Ellen's plight and they took up her case. It was discovered that the child could have no protection under the law until the guilt of her persecutor was established under existing legal forms. Under these circumstances they turned to the American Society for the Prevention of Cruelty to Animals, which handled the case. The investigation of other children's cases suggested the desirability of an organization that could do for children what was already being done for animals by a number of organizations. Mr. Bergh, Mr. Elbridge T. Gerry and Mr. John D. Wright who were already interested in the work for animals, launched the new venture, and Mr. E. Fellows Jenkins was drawn away from the American Society to become Superintendent of the new organization, a post just resigned by him. The Society was formed to rescue children from vicious and immoral surroundings and to prosecute offenders, to prevent cruel neglect, beating or other abuse of children, to prevent the employment of children for mendicant purposes or in theatrical or acrobatic performances and for the enforcement of all laws for the protection of minors from abuse.

The Society, during all its thirty-five years of work, has consistently avoided all alliances that would bring its activities into co-operation with other organized work for the improvement of the conditions surrounding child life. Meanwhile, the movement thus inaugurated has become world-wide. In the United States, other societies followed the New York society in the following order: 1875—Rochester, 1876—Portsmouth, N. H., 1876—San Francisco, 1877—Philadelphia, 1878—Boston, 1878—Baltimore, 1879—Buffalo, 1879—Washington, Del., 1880—Brooklyn, 1880—Richmond County, N. Y. These all adopted the New York model, as other local societies have since done, principally in the states of New York and New Jersey. The large majority of protective societies, however, combine work for children with that for animals. Indeed, aside from two California societies, two in Virginia, one in Rhode Island, one in Tennessee, one in Michigan and one in Louisiana, those above mentioned in addition to New York and New Jersey societies are the only ones in which the work for children is not combined with that for animals. This of course excludes those instances in which child protection is made a phase of the activities of societies doing general charity work." (31.135-6.)

No less authority than Professor Stimson says, "Perhaps the most dangerous tendency, at least to conservative ideas, is the increasing one to take the children away from the custody of the parents, or even of the mother, and place them in state institutions. Indeed, in some western states it would appear that the general disapproval of the neighbors of the method employed by parents in bringing up, nurturing, educating, or controlling their children, is sufficient cause for the state authorities to step in and disrupt the family by removing the children, even when themselves unwilling, from the home to some state or county institution. Any one who has worked much in public charities and had experience with that woeful creature, the institutionalized child, will realize the menace contained in such legislation" (39.337-8). And Professor Stimson's opinion seems to be indorsed in the attitude of the Pennsylvania Society for the Prevention of Cruelty to Children, according to the following: The Pennsylvania Society is another that has come to share "the modern economic thought that the normal condition of the child is in the home, even though the home be a poor one; the children often help their parents to reform, and the father and mother can in many instances be made to realize and feel that upon them is the burden of responsibility to see that their children do not become in any sense a charge upon the community. Its belief in this theory is evidenced by the fact that in the year just closed 1,522 cases have been passed over to what is technically known as 'Supervision,' cases in which perhaps on the first the breaking up of the family seemed justifiable. Endeavors have, therefore, been made in every case to preserve the family as a whole. The results obtained by visitors and agents in this work of reconstruction have been beyond belief." (31.143.)

A piece of legislation worthy of note is found in the Maryland Code P. G. L. art. 6, sec. 24, as printed on page 9 of the 6th Edition of the Manual of the Maryland Society for the Protection of Children, compiled by Lewis Hochheimer, Esquire. It reads as follows: "2. Sheltering Children—Persons who receive into their homes or employ children who have left their parents, guardians or other custodians on account of actual or supposed illtreatment are protected against vexatious suits by express provision of law. No person who in good faith receives, harbors, persuades away or removes from a parent, guardian or master any minor for the purpose of sheltering or protecting such minor from illtreatment or suffering can be held to incur any liability therefor." (21.9.)

(II) *Offense Against Children forbidden under Penalty.* (a) *General.* According to Mr. McRea's "Summary of State Laws for Child Protection" there are general statutes in some states. It does not follow that, even in the states where no such general statutes exist, the strong arm of the law cannot be invoked for child protection. Mr. McRea found four offenses mentioned in some general statutes namely: "To willfully cause or permit (a) life or health of any child to be endangered, (b) or unnecessarily expose to weather, (c) or cruelly torture or punish, (d) or neglect or deprive of necessary food, clothing and shelter." Kansas (boy under 14 or girl under 16. Search warrant may be issued and child removed.), Michigan (officers may search on issuance of warrant), Utah (boys under 14, girls under 16), and Wyoming seem to be the only states that can be credited with general statutes enumerating the four offenses. Twenty states have no general statutes and the remaining states include all those having from one to three of the four general statutes mentioned.

(b) *Abandonment, Desertion, Non-Support.* Here is included (a) abandonment, (b) or willful failure to provide food, care, shelter, etc., to minor, (c) sentence may be suspended under bond to observe conditions imposed by court, (d) failure to comply with such conditions leads to execution of sentence, Illinois (under 12) Iowa, Maryland, Minnesota (under 15). Nebraska, North Dakota, Ohio, Pennsylvaia (under 16), Texas (under 12) and Wyoming have so legislated. Alabama, Arkansas, Mississippi and Nevada are reported as without laws. Michigan has a law that if the parent is imprisoned, the earnings, if any shall be paid to family (1907 No. 44). In Arizona it is deemed abandonment to send a child to a saloon or house of ill-fame.

(c) *Exhibitions and Employments* (*not child labor*). To apprentice, exhibit or use any child under——years (a) in any place where intoxicants are sold, (b) as gymnast, acrobat,

dancer, etc., (c) for obscene or immoral purposes, (d) for begging, (e) in any business or exhibition dangerous to life or limb, (f) for peddling, (g) at rag-packing, junk gathering, etc., (h) exception made of church, school, musical or other entertainments for educational or scientific purposes. Wyoming, for children under 14, seems to be the only state that has specific laws on the entire eight subdivisions. Sixteen states are reported as having no legislation. The remaining states include Illinois that has legislation covering seven of the eight divisions of our topic, New York and Ohio with six provisions each.

(d) *Obscene Literature, etc.* (a) To show, publish, give or sell literature, prints, etc., (b) or permit a child to distribute such: Illinois, Minnesota (to show in public to minor), Montana (or criminal news to minor under 16), Nebraska (or criminal news to minor), New Hampshire, New York, and North Dakota (under 18) have enacted laws. Arizona makes it an offense to use indecent language before a minor; Florida penalizes the marking of school places in obscene way by others than pupils; Iowa prohibits the introduction of obscene literature into home, or give to minor, or use phonograph for indecent songs; and Kansas by statute excludes minors from trials where vulgar evidence is produced.

(e) *Admittance to Resorts.* District of Columbia, Kansas, Louisiana, Maryland, Oklahoma, South Carolina, Utah and Virginia are reported as having no laws on the admittance of children to resorts. Twelve states are reported as forbidding their admittance to resorts, unaccompanied by parent or guardian. The following forbid the admittance of children to places where intoxicants are sold: Arizona (under 16), California (under 18), Colorado, Connecticut (unlawful for a minor to loiter about a saloon), Delaware (under 18), Idaho (under 16), Illinois, Indiana (male under 16, female under 17), Iowa, Maine, Michigan, (under 17), Nevada (loiter in), New Hampshire, New Jersey (to play games), New York, North Carolina (under 18 or billiard room, or bowling alley, when adverse notice has been served by parent or guardian), Ohio, Oregon, Pennsylvania (under 18; or any place dangerous to health or morals—1885, Act. of May 28, see 1907, Act of May 29—under 16 in house of prostitution or opium den), South Dakota, Vermont, West Virginia (under 18, or any place dangerous to health or morals) and Wisconsin (or girl under 17 to dance or ball), California makes it an offense to send or direct a minor under 18 to saloon, gambling or immoral place. Colorado forbids admittance to places where obscene plays are performed or where game of chance or for playing for wager is in progress. Massachusetts forbids a child under

14, to be admitted to any resort, after sunset, unaccompanied by adult and under 17, to any dance hall or skating rink unaccompanied by adult, school or church dances excepted. Michigan prohibits the admission of a child under 17 to theatre, dance hall or show place or billiard or ten-pin room; or for a minor to remain in; school pupils included, 1907, No. 55. Minnesota makes it criminal to admit or invite a minor under 18 to a house of ill-fame. In New Jersey the child under 16 cannot be admitted to theatres, dance-halls or show-places and the fines for violations go to the poor fund. It is a crime in the State of Washington to allow a minor to play cards in one's home without consent of parent or guardian, Ball. Code, Sec. 7314.

(f) *Sales of intoxicants to Minors.* Relative to selling liquor to minors, Lewis Sutherland's Statutory Construction reads: "Statutes forbidding the sale of liquor to minors are common, for a treatment of the subject see Black on Intoxicating Liquors, No. 415-422. Some courts hold that an honest and well founded belief that the minor was of lawful age is a good defense to a prosecution under the statute. Other courts hold that such a belief is no defense and that the vendor must ascertain at his peril whether the person to whom he sells is a minor. Where the statute made it unlawful to sell, furnish or give liquor to a minor, a saloon-keeper who allows an adult to treat a minor in his saloon is guilty of furnishing liquor to the minor within the statute. In such a case the saloon-keeper has also been held to deal or traffic in liquor with the minor. But such a transaction is held not to be a sale or gift to the minor. Where a minor expressly buys liquor for an adult, pays for it with the adult's money and delivers it to him, it is not a sale to the minor. Where sales on the written order of the parent, guardian or family physician were expected, it was held that a general order from a parent to sell or give his son from day to day and at all times as much liquor as he wanted was not such an order as the statute contemplated. An act forbidding the sale of liquor to minors provided that a sale by an agent should be deemed and taken to be the act of his master. It was held that a sale by an agent was not conclusive, but only *prima facie* evidence of a sale by the master, and that it would be a good defense that the master had in good faith forbidden such sales. (28.1276-7.) In the following states the sale of intoxicants to minors is forbidden: Alabama (parent has right of action), Arizona (under 16; or to give without consent of parent or guardian), California (under 18), Colorado, Connecticut (and minor is punishable for misrepresentation of age). Delaware (or to procure for), Florida, Georgia (father has right of action

against person who furnishes without his permission. Sale forbidden without permission of parent or guardian), Idaho (or to give), Illinois (to give, without order of parent or physician, or to buy or procure for, without such order), Indiana (and misrepresentation of age punishable, loitering in saloon not to be permitted), Iowa (or to give to, or to procure for, except on order of parent or physician), Kansas (treating or giving by any parent, guardian or physician), Kentucky (without order of parent), Louisiana (or to furnish or to obtain for, or to allow to loiter in saloon), Maine, Massachusetts (whoever sells or gives to a minor either for his own use, the use of parents or of other person, or allows a minor to loiter on premises shall forfeit one hundred dollars for each offense to be recovered by parent or guardian in an action of tort), Minnesota (or pupil except by licensed pharmacist), Mississippi (and minor punishable for false representation of age), Missouri (without permission of parent or guardian), Montana (or gives), Nebraska (or gives), Nevada (and false representation of age punishable), New Hampshire, New Jersey (or give, under 18), New Mexico, New York, North Carolina (to unmarried minor, or to make purchase for), North Dakota (or give, or treat except by order of parent or physician), Ohio (or furnish), Oregon (deliver to, or allow to loiter. Penalty, loss of license. Misrepresentation of age punishable), Pennsylvania (and misrepresentation of age punishable), Rhode Island, South Carolina (or furnish), South Dakota, Tennessee (or to furnish or entice to place where sold), Texas (or to give, without consent of parent or guardian), Utah (or to furnish or procure for), Vermont, Virginia (to sell or procure for pupil in school or college of State), Washington (or give, without consent of parent or guardian, minor between 18 and 21 punishable for misrepresentation of age), West Virginia (unless by prescription, or loitering about saloon), Wisconsin (misrepresentation of age by minor over 18 punishable), and Wyoming. The sale of candy containing liquor or flavor of same is forbidden. Massachusetts (more than 1% of alcohol under 16), Vermont (1906, No. 50) and Wisconsin (1907 Ch. 168).

(g) *Tobacco Laws.* Ten states now have on their statute books laws prohibiting the manufacture and sale of cigarettes and cigarette papers. They are as follows: Tennessee (1897), Wisconsin, Minnesota, South Dakota, Iowa (with $300 mulct provision), Nebraska, Kansas, Arkansas, Oklahoma and Washington. The sale of cigarettes to children is forbidden in the following states: Alabama (or furnish; or materials for such), Arkansas (or tobacco in any form, manufacture and sale of cigarettes forbidden), Arizona (under

16, tobacco in any form; or furnished), Colorado (or gift of tobacco in any form to minors under 16), Connecticut (use of tobacco in public place by minor under 16 forbidden), Delaware (or furnish, or materials for such to minor under 17), Florida (or furnish or procure, or materials for such, for minor under 18), Georgia (or furnish or materials for such), Idaho (or give or materials for such), Illinois (under 16, or tobacco in any form without written order of parent or guardian), Indiana (or furnish, or materials for such, or tobacco in any form to minor under 16, or to advise to use), Iowa (under 16, tobacco in any form. Manufacture and sale of cigarettes forbidden), Kansas (under 21, tobacco, opium or narcotic in any form). Under date of March 18, 1911, Superintendent Lucy Page Gaston of the Anti-cigarette League wrote, "The Kansas law forbids the use of tobacco in any form by minors under 21." Manufacture and sale of cigarettes are forbidden in Kentucky (under 18; or furnish such or materials for such or council to smoke), Louisiana (or material for such), Maine (or give), Maryland (under 15; tobacco in any form without permission of parent or guardian, unless acting as agent of employer). Other persons may not purchase cigarettes for a minor in Massachusetts (under 18; or not being parent or guardian gives to minor under 18; tobacco in any form under 16; or not being parent or guardian gives to minor under 16 shall be punished by a fine of not more than fifty dollars). Michigan (or furnish tobacco in any form to minor under 17, except on order of parent or guardian), Minnesota (furnishing to tobacco or allowing about premises to smoke, manufacture and sale of cigarettes forbidden), Mississippi (or furnish tobacco in any form to minor under 18 without consent of parent), Missouri (or furnish, or materials for such, to minor under 18), Montana (or give tobacco in any form), Nebraska (give or furnish tobacco in any form to minor under 18, manufacture and sale of cigarettes forbidden), Nevada (or give; or cigarette paper. Tobacco in any form to minor under 18, except on order of parent or guardian), New Hampshire (giving tobacco to minor under 18), New Jersey (cigarettes under 18; or furnish, or paper for such, under 14 tobacco in any form), New Mexico (or give; or tobacco in any form, minor under 18, or pupil, without consent of parent or guardian), New York (under 16, minors under 16 not to smoke in public places), North Carolina (minor under 17, or aid in getting, or materials for such), North Dakota (or furnish tobacco in any form), Ohio (or furnish under 16), Oklahoma (manufacture and sale of cigarettes forbidden or gift of cigarettes to any one), Oregon (under 18; or give tobacco in any form without consent of parent or

guardian, and such minor may not smoke in public), Pennsylvania (under 16, tobacco in any form; or furnish cigarettes or paper to any minor), Rhode Island (unlawful for minor under 16 to use tobacco in public), South Carolina (or furnish; or materials for such. Half fine goes to informer), South Dakota (sale or manufacture of cigarettes forbidden. Unlawful for minor to smoke in public, or for any one to abet same), Tennessee (tobacco in any form without consent of parents to minor of 17, manufacture and sale of cigarettes forbidden), Utah (under 18; or furnish tobacco, opium or narcotic in any form), Vermont (under 16, or furnish tobacco without consent of parent or guardian, or furnish cigarettes or wrappers), Virginia (under 16), Washington (and of materials for such forbidden; or furnish tobacco in any form to minor; unlawful for minor to smoke cigarettes or to counsel him to smoke, manufacture and sale of cigarettes forbidden), West Virginia (or opium or furnish), Wisconsin (tobacco in any form, manufacture and sale of cigarettes forbidden), and Wyoming (under 16).

(h) *Carnal Abuse.* The carnal abuse of a female child is a felony punishable under extreme provisions for rape. "In some jurisdictions it is held that a statute punishing for rape any person who shall have carnal knowledge of any woman forcibly and against her will, or any person who shall carnally know or abuse any female under a certain age with her consent, defines but one crime and not two distinct crimes; but in others the statute is construed as defining two distinct crimes" (11.33. 1418). Statutory provisions applying to the carnal abuse of a female child are as follows: Alabama (girl under 12 by male over 16; girl between 12 and 14), Arkansas (girl under 16), Arizona (male over 14 with girl under 17), California (under 16), Colorado (male over 18 with girl under 18. If male is under 20, sentence may be commuted to commitment to State Reform or Industrial School), Connecticut (under 16; any parent or guardian who consents to the detention of a female under 21 for prostitution or carnal intercourse may be fined $1,000 and imprisoned for one year), Delaware (under 18; lascivious playing with girl under 16), District of Columbia (under 16), Florida (under 10; capability of boy under 14 shall be determined by the jury), Georgia (under 12; punishment may be death or on jury's recommendation of mercy twenty years imprisonment), Idaho (under 18, by male over 14), Illinois (under 15, by male over 17), Indiana (under 16), Iowa (under 18; also lewd act of person over 18 with child under 13), Kansas (under 18), Kentucky (under 12; under 16 over 12 lighter penalty), Louisiana (between 12 and 18 by male over 17), Maine (under 14, also between 14 and 16,

lighter penalty), Maryland (under 14; also male over 18 with female between 14 and 16), Massachusetts (under 16), Michigan (under 16; male over 14 with girl 14; also to debauch a male under 15, or take a girl under 17 to house of prostitution), Minnesota (under 16; under age of 10 punished by imprisonment for life; of girl between 10 and 14 imprisonment from 7 to 30 years; of girl between 14 and 16 three months to a year in county jail or one to seven years in state prison), Mississippi (under 12), Missouri (under 14; between 14 and 18), Montana (minor 16 by male over 16), Nebraska (with chaste girl under 18, by male over 18), Nevada (under 14 by male over 15), New Hampshire (to willfully and deceitfully entice or carry away a female child under 18 for purpose of prostitution of illicit intercourse), New Jersey (under 16), New Mexico (under 10; under 14 by male over 14), New York (under 18), North Carolina ("virtuous" female between 10 and 14), North Dakota (under 18, by male over 14), Ohio (under 16 by a male over 18), Okalahoma (under 14 , male over 14, also female between 14 and 16 of previously chaste character), Oregon (under 16 by male over 16), Pennsylvania (under 16, of good repute), Rhode Island (under 16), South Carolina (under 14 and under 16, by male over 14, after abduction), South Dakota (under 18 by male over 14), Tennessee (under 12), Texas (female under 15 by male over 14), Utah (between 13 and 18), Vermont (of girl under sixteen by a male over 16; a male under 16 with a consenting female under 16 are guilty of a misdemeanor and may be committed to the Vermont Industrial School), Virginia (under 14), Washington (under 18), West Virginia (under 14. Does not apply to male under 14 with female over 12 with free consent), Wisconsin (under 18, previously chaste), and Wyoming (under 18).

(i) *Corporal punishment in Schools.* Bardeen's School Law has twenty pages on corporal punishment. After discussing the common law right of the teacher to inflict corporal punishment, Mr. Bardeen says. "A change of sentiment is manifest in recent decisions. The teacher will not find it safe to rely upon modern confirmation by courts of many decisions once rendered and long considered good authority (4.234). Every year this tendency is becoming more and more marked, and the teacher who cannot govern *without* severe corporal punishment will do well to retire from teaching before he is forced out" (4.235). The Laws of 1909 in New York read: "To use or attempt, or offer to use force or violence upon or toward the person of another is not unlawful when committed by any guardian, master or teacher in the exercise of a lawful authority to restrain or correct his child or scholar, and the

force or violence used is reasonable in manner and moderate in degree" (88.1909, N. Y.). "But even here," says Mr. Bardeen, "the teacher is subject to the rules established by the trustees. When the trustees have made a rule forbidding corporal punishment, the teacher may not inflict it" (4.223). New Jersey, and some cities like New York and Syracuse forbid corporal punishment (4.221). "In 1889, Arizona dropped the enactment expressly authorizing corporal punishment" (4.236). Prior to 1899 in Arizona any teacher before inflicting corporal punishment upon a pupil must first notify the parent or guardian and one member of the board of trustees of his or her intention at least one day before such punishment is to be inflicted stating the day and hour at which the punishment will be inflicted and extending an invitation to such parent and one trustee to be present" (4.229). The law just mentioned is not reported to have required engraved invitations with "R. S. V. P." nor the presence of the coroner or a representative of the Associated Press. Cyc., (v. 35, p. 1137) reads, "As a general rule, a school teacher, in so far as it may be reasonably necessary to the maintenance of the discipline and efficiency of the school, and to compel a compliance with reasonable rules and regulations, may inflict reasonable corporal punishment upon a pupil for insubordination, disobedience, or other misconduct, but a teacher cannot inflict corporal punishment to enforce an unreasonable rule, to compel a pupil to pursue a study forbidden by his parent, or to compel him to do something which his parent may have requested that he be excused from doing, although the teacher may be justified in refusing to permit the attendance of the pupil whose parent will not consent that he shall obey the rules of the school. The infliction of corporal punishment by a teacher is largely within his discretion; but he must exercise sound discretion and judgment in determining the necessity for corporal punishment and the reasonableness thereof, under the varying circumstances of each particular case, and must adapt the punishment to the nature of the offense, and to the age and mental condition and personal attributes of the offending pupil, and, considering the circumstances and conditions of the particular offense and pupil, the punishment must not be inflicted with such force or in such a manner as to cause it to be cruel or excessive, or wanton or malicious" (11.35.1137-9). After reading this quotation one is forced to remark that the ever increasing responsibilities of the office have not yet led the public to pay the average teacher as high a wage as the average brick-layer, carpenter and plumber receive. May be it is because the brick-layer, carpenter and plumber first organized unions, and then persistently followed

the injunction: "Ask and you shall receive." What has been said on corporal punishment thus far, applies to cases where the teacher has not been attacked by the pupil. The legal right of self-defense is possessed by every teacher and no legislature will attempt to take it away. Finally as to corporal punishment, Dr. Snedden says, "As in the public schools, there is a general belief that the complete prohibition of whipping would have a bad moral effect; but that by the proper development of other means of control, its use may or ought to be almost entirely dispensed with" (35.147). President G. Stanley Hall and many others subscribe to this belief.

(j) *The Neglected Child.* Judge Baker, of the Boston (Mass.) Juvenile Court in a paper read at Massachusetts Conference of Charities, Fitchburg, October, 1910, said, "Probably the case ordinarily thought of when neglected children are mentioned is that of children who have no regular meals, get only scraps of food and are constantly hungry; who are clad only in dirty, ragged outer garments, without stockings, shoes or under clothes; whose flesh is encrusted with dirt; whose hair is infested with vermin; whose parents are seldom sober, usually idle and frequently in jail. Our statutes, however, authorize interference in a much larger class of cases" (3.3). Judge Baker went on to describe the larger class by giving examples of sober, industrious parents failing to have the child's eyes treated for ophthalmia neonatorum, not providing glasses, surgical attendance or living in unhygienic quarters when able to afford better, as illustrating cases of children who "by reason of the neglect of parents are growing up without proper physical care" mentioned in the Massachusetts statutes. Other cases included the child "excellently fed and clothed and the pink of neatness" but if its parents are selling liquor illegally or letting rooms in their house for immoral purposes, the child can be taken away because in the words of the statute 'by reason of the crime of its parents' it is growing up 'under circumstances exposing it to lead an idle and dissolute life' (3.5). Again, Judge Baker said, "Children may be properly fed, clothed and fairly well cleaned but be suffered by their parents to be frequently tardy and absent from school, and spend all their time when out of school running the streets all over the city because the mother not satisfied with the husband's steady earnings of $18.00 a week, insists on going out to work herself. Such children can be brought to court because 'by reason of neglect of their parents' they are 'growing up without salutary control'" (3.5). These examples from the paper of Judge Baker, with what has been already said on "Laws for Child Protection"

in this study, will give a general idea of the legal problem known as the "neglected child." In the introduction to "Juvenile Court Laws in the United States," Expert Special Agent John Koren, of the United States Bureau of the Census, wrote: "In addition to hearing cases of delinquency these courts (Juvenile Courts) are charged with the disposition of dependent and neglected children. In many instances the laws prescribing the authority and duty are so bound up together that they cannot very well be separated. Moreover, the functions of the juvenile courts and their peculiar place in the community cannot be correctly estimated if viewed solely in relation to delinquency cases. It therefore seemed wisest to incorporate in the summary the legislation relating to dependent and neglected children, so far as the juvenile courts are concerned with them." (18.3.) The various efforts in several states, and especially in large cities, to care for neglected children are summarized by Mr. Homer Folks in his monograph on the Care of Destitute, Neglected and Delinquent Children. (New York, 1902.)

(18) Juvenile Court Laws

Juvenile Court Laws "have in recent years come in for the larger share of attention in all of our state legislation. Radical changes, with a view to recognizing the independence of the child and the desirability of treating it both apart from the usual rules of procedure and punishment applicable to adult criminals and also with a view to holding the parent or guardian responsible for the wrong doing of the child as well as to secure better environmental conditions by removing it entirely from the custody of the parent, have found a place in the law of most states." (32.1.624.) "Juvenile Court Laws in the United States—A Summary by States, by Thomas J. Homer; A topical abstract by Grace Abbott; Edited by Dr. Hart, of the Russell Sage Foundation, appeared in 1910, and should be consulted by every one interested in the subject. It is a book of 150 pages, and its comprehensiveness and compressibleness become evident the more it is tested and examined. This section in touching on only some of the salient points can at the most only serve as an indicator pointing to "Juvenile Court Laws in the United States Summarized" (18). Twenty-three states have enacted juvenile court laws, and they are Alabama, California, Colorado, Georgia, Idaho, Illinois (1899), Indiana, Iowa, Kansas, Kentucky, Louisiana, Massachusetts, Michigan, Minnesota, Nebraska, Ohio, Oregon, Pennsylvania, Tennessee, Texas, Utah, Washington, Wisconsin—and in the

District of Columbia. "Under the common law a child of seven was regarded as responsible for his acts and was treated as a criminal in the charge, the trial, and the disposition made of him after the trial. Under the new theory the child offender is regarded not as a *criminal* but as a delinquent, 'as misdirected and misguided and needing aid, encouragement, help and assistance;' he is kept entirely separate from the adult offender, and the probation system is used whenever practicable. These are the most important features of the new legislation which has been adopted in the states enumerated" (18.122). District of Columbia, Colorado, Indiana, Louisiana, Massachusetts, Michigan, Maryland, Missouri and Utah have created special courts which are given jurisdiction over juvenile offenders alone. "Most states have found, however, that it presented fewer legal difficulties to use some court already established in this jurisdiction." (18.123). "In the great majority of states the jurisdiction of the Juvenile Court extends to children 16 or 17 years of age. But in Illinois and Kentucky the limitation is for boys 17 and girls 18, in Louisiana, Nebraska and Oregon 18 for both, and in Utah 19 for both boys and girls" (18.125). The more inclusive laws of Alabama, Colorado, Illinois, Indiana, Kentucky, Louisiana, Michigan, Minnesota, Missouri, Nebraska, Ohio, Tennessee, Texas, Utah and Washington regard "as a delinquent any child who (a) knowingly associates with thieves, vicious or immoral persons, (b) absents itself from home without the consent of its parent or guardian or without just cause, (c) is growing up in idleness or crime, (d) knowingly visits or enters a house of ill repute, (e) visits or patronizes gambling houses, saloons, or bucketshops, (f) wanders about the street at night or about railroad yards or tracks, (g) jumps on and off trains, (h) enters a car or engine without lawful authority, (i) uses vile, obscene or indecent language or is (j) immoral or indecent" (18.126-7).

The subdivisions of delinquency conceive the child as actively at fault, while the laws covering the neglected child and the dependent child look upon them as more passive or the victims of the faults of others. And it is to be remembered that juvenile courts are concerned not only with the delinquent but also with the neglected and dependent child. The procedure in juvenile courts may be "initiated" on a petition in California, Illinois, Iowa, Kansas, Kentucky, Louisiana, Michigan, Minnesota, Nebraska, New Hampshire, Ohio, Oregon, Tennessee and Wisconsin. In Alabama, Colorado, Massachusetts, Missouri, Texas, Utah and Washington, the old word "complaint" is used. (18.127.) A "summons" issues on the filing of the "petition" or "complaint"

in many states. This "summons" is addressed to the parent or guardian and directs him to appear with the child in court on a certain date. The laws in force in Indiana, Iowa, Kansas, Kentucky, Minnesota, Missouri, New Hampshire, New Jersey, Ohio, Oregon, Washington and Utah make "the trial quite informal so that an intimate friendly relationship may be established at once between the judge and the child." New Jersey and New York follow the regular criminal procedure as does also Michigan when the child is charged with a felony" (18.129). The District of Columbia and eight states reserve the right of appeal from the decision of juvenile judges. Twenty-one states require a separate Juvenile Record. A dozen states require the juvenile court to be held in a separate room and Chicago and Milwaukee have separate Juvenile Court Buildings. (18.131.) Six states "provide that the trial shall not be public and all persons not necessary to it shall be excluded." (18.132.) Pending trial no child under twelve shall be committed to jail in Illinois, Michigan and California, under fourteen in Colorado, Idaho, Kentucky, Massachusetts (except when arrested in the act of violating a law of the commonwealth or on a warrant; if over 14 may be comitted to jail if court thinks he will not otherwise appear for trial, Montana, Nebraska, Ohio, Tennessee, Washington and Wisconsin, under sixteen or seventeen in Kansas, New Hampshire, Texas and Utah (18.133.) Fifteen states have a detention "home" or "school" instead of a jail for juveniles awaiting trial. The juvenile Judge in "most states can continue the hearing from time to time, leaving the child, under the supervision of the probation officer, in its home or in some suitable family or commit it to some detention school or House of Reform or to any institution willing to receive it and having for its object the care of delinquent children" (18.134.) Connecticut, District of Columbia, Indiana and Massachusetts provide that the court may fine or imprison the child for the original offense (seldom done in Massachusetts) or for violating the conditions of probation—Illinois, Massachusetts (if child is over 14), Ohio, Oregon and Texas leave a loophole for a return to the old system by providing that the judge may order the child to be proceeded against and sentenced under the existing criminal laws of the state (18.135.) Illinois, Missouri and Wisconsin select the probation officers for their juvenile courts from eligible lists determined by competition civil service examination. In most of the states the juvenile Judge has the appointment of the Juvenile Probation officer (18.136). "The duties of the probation officers, the law provides in almost all the states having Juvenile Court Laws, shall be (a) to investigate any

child to be brought before the Court, (b) to be present in court to represent the interests of the child, (c) to furnish such information as the judge may require and (d) to take charge of any child before and after trial." (18.137.) The following states have statutes punishing by fine or imprisonment parents or others who contribute to the child's delinquency: Colorado ($1,000 fine or 12 months imprisonment or both), Connecticut ($500 fine or 6 months imprisonment or both), District of Columbia ($200 fine or 3 months or both), Idaho ($500 or 6 months or both), Illinois $200 or 12 months or both), Indiana ($500 or 6 months or both), Kansas ($1,000 or one year or both), Kentucky, Massachusetts ($50 or 6 months or both), Minnesota ($500 or 6 months or both), Missouri, Nebraska ($500 or six months or both), New Jersey ($1,000 or 12 months or both), Louisiana, New York, Ohio ($1,000 or 12 months or both), Texas ($1,000 or 12 months or both), Utah, Washington ($1,000 or 12 months or both) and Wisconsin ($500 or one year or both) (21.138-9). In the following states, with the exceptions noted, a child "in no case may be sent to a common jail but to a special place of detention:" Alabama (may be so placed if captured for a felony, in nighttime, or in exceptional cases for safe-keeping until home can be found), Arizona (but no child under 12 may be committed to the Industrial School unless this seems best after probation), California (under 12. Others must be kept separate from adults), Colorado (under 14), Georgia (under 16), Idaho (under 14), Illinois (under 12,) Indiana (boys under 16, girls under 17), Iowa (under 17), Kansas (except in case of felony), Kentucky (children at jails must be looked after by matron. Dependent and neglected must be kept apart from delinquent, boys under 17, girls under 18), Louisiana (neglected and delinquent under 17), Maryland (under 16), Massachusetts (lock-up or house of detention to be avoided, whenever possible—under 14, except for offense ordinarily punished by death or life imprisonment), Michigan (under 12 or with adults if under 17), Minnesota (under 14; between 14 and 16, to be separate from adults), Montana (under 14), Nebraska (under 14; between 14 and 16 not with adults), New Hampshire (under 17), New York (under 16 no longer than necessary for the purpose of transfer. Not with adults except in presence of proper officials), Ohio (under 12); Oregon (under 14 and others must be kept apart from adults), Pennsylvania (under 12, not to be sent to any correctional institution pending hearing, not to be confined in institution for adults), Rhode Island (under 16, older ones at discretion of court. State probation officer may have custody of girl under 16, not longer than six months), South Dakota (under 16), Tennessee (under 14,

and not to be incarcerated except to guarantee appearance in court), Utah (boys under 14, girls under 16), Vermont (under 16, not to be sent to the house of correction for first offense, but to state industrial school), Washington (under 14, and none shall be placed with adults) and Wisconsin (under 14; and between 14 and 16, not with adults) (18.395-431). Finally it should be stated that a child in most states becomes an adult, before the criminal law, earlier than he does before the civil law, that the juvenile age fixed by the legislation of the states does not correspond to the age of majority; that when the juvenile age is passed the child is subject to treatment as an adult, although many states are not unmindful of the possibility of reformation taking place even in manhood.

(19) Child Labor Laws

A summary of the child labor laws in force in 1910 has been prepared by Laura Scott, and will be found in "Legislative Review, No. 5, American Association of Labor" (34).

All states and territories except Nevada have enacted laws on child labor. The following have laws prohibiting any child labor whatever: Arizona (under 14 during school hours without proof that child is excused from school attendance), Arkansas (under 14 without age and dependency certificate or schooling certificates), Colorado (under 14 during school term without school certificate; 14 to 16 who cannot read and write, without schooling certificate), Connecticut (under 14 when school is in session; 14 to 16 who cannot read must attend night school), Delaware (under 14 in any gainful occupation), Florida (under 12 when school is in session), Idaho (in any gainful occupation under 12; 12 to 14 during school session; 14 to 16 without required school instructions), Illinois (under 14; 14 to 16 who cannot read and write, without age certificate; 14 to 16 who cannot read and write, without age certificate and night school certificate if there is a night school held in such place), Kansas (under 14 when school is in session), Kentucky (under 14 during school hours; 14 to 16 without employment certificate), Maryland (under 12; 12 to 16 without permit), Massachusetts (under 14 while school is in session), Minnesota (under 14 when school is in session; 14 to 16 without employment permit and medical certificate if demanded), Missouri (under 14, 14 to 16 without age certificate), Montana (during school term under 16 without schooling certificate), Nebraska (during school hours under 14), New York (during school term under 14; 14 to 16 in cities of first and second class without employment certificate or school certificate), North Dakota (under 14 during the term of public school), Oregon (under 14 during school hours), Washington (under 15 without schooling certificate) and Wisconsin (under 14; 14 to 16 without permit). Night labor for children under twelve is prohibited from 8 P. M. to 6 A. M. in South Carolina in factories: mines and textile establishments—under *fourteen* in Arkansas (7 P. M. to 6 A. M. in factory manufacturing), Georgia (7 P. M. to 6 A. M. in factory, manufacturing), North Carolina (7 P. M. to 6 A. M. in any), Texas (6 A. M. to 6 A. M. in any), Virginia (6 P. M. to 7 A. M., manufacturing, mechanical mining), under *sixteen* in Alabama (from 7 P. M. to 6 A. M. in factories and mills), California (10 P. M. to 6 A. M. in hotels, laundries, manufacturing, mercantile, messenger, office, place of amusement, restaurants and workshops),

Connecticut (after 10 P. M. in mercantile), Delaware (6 P.M. to 7 A. M. in any gainful occupation), District of Columbia (10 P. M. to 6 A. M.), Idaho (9 P. M. to 6 A. M. in any occupation), Illinois (7 P. M. to 7 A. M. in any gainful), Iowa (9 P. M. to 6 A. M. in elevator, factory, laundry, manufacturing, mercantile, mill, mine, packing house, shop, slaughter house, store), Kansas (6 P. M. to 7 A. M. —distribution of messages or merchandise, elevator, factory, messengers, mine, packinghouse, theatre, workshop), Kentucky (7 P. M. to 7 A. M. in any gainful occupation), Louisiana (male under 16, female under 18—7 P. M. to 7 A. M. in any work), Michigan (male under 16, female under 18—6 P.M. to 6 A.M. in manufacturing, messengers [except for telephone, telegraph or post office], mine, workshop), Minnesota (7 P. M. to 7 A. M. in any gainful occupation), Mississippi (7 P. M. to 6 A. M. in manufacturing), New York (5 P. M. to 8 A. M. in factory; under 16—10 P. M. to 7 P. M.—under 16 after 7 P. M.; cities of first class—in apartment house, business office, distribution of messages or merchandise, hotel, mercantile establishment, messenger, restaurant, telegraph office, transmission of messages or merchandise), North Dakota (7 P.M. to 7 A. M. any), Ohio (male under 16, female under 18—6 P. M. to 7 A. M.), Oklahoma (male under 16, female under 18—6 P. M. to 7 A. M.), Oregon (6 P. M. to 7 A. M. in any), Pennsylvania (9 P. M. to 6 A. M.), Rhode Island (8 P.M. to 6 A. M. in business establishment, factory, manufacturing, except mercantile establishments on Saturday and four days preceding Christmas), Vermont (after 8 P. M. in factory, messenger, mill, quarry, railroad, workshop), Washington (8 P. M. to 5 A. M.) and Wisconsin (9 P. M. to 6 A. M. in any); under *eighteen* in New Jersey (7 P.M. to 7 A.M. in factory, manufacture of goods of any kind, mill, workshop), New York (male 16 to 18 from 12 midnight to 4 A. M., and female 16 to 21 from 9 P. M. in factories); under *twenty-one* in Massachusetts (between 10 P. M. and 6 A. M. in mercantile, and manufacturing.

Florida, Missouri, Montana, Nebraska, Nevada, New Mexico, South Carolina, Texas, Utah, Vermont, Washington, West Virginia and Wyoming have no legislation on the number of hours that a child shall work per day or per week. Legislation in the other states as to the maximum hours of child labor is as follows: Alabama (under 14, 60 hours per week), Arkansas (under 14, 60 hours per week 10 per day), California (under 18, 54 per week 9 per day) Colorado (under 16, 8 per day), Connecticut (under 16, 58 per week), Delaware (under 16, 54 per week 9 per day), District of Columbia (under 16, 48 per week), Idaho (under 16, 54 per week 9 per day), Illinois (under 16, 48 per week 8 per day), Indiana (male under 16 female under 18, 60 per week 10 per day, under 14, 8 per day), Iowa (under 16 10 per day), Kansas (under 16, 48 per week 8 per day), Kentucky (under 16, 60 per week 10 per day), Louisiana (under 18, 60 per week 10 per day), Maine (male under 16, female under 18, 58 per week 10 per day), Maryland (under 16, 10 per day), Massachusetts (under 18 in mercantile 58 per week; under 18 in manufacturing 56 per week 10 per day, under 18 in any other employment for wages or other compensation 58 per week with average for year 56 per week), Michigan (under 18, 54 per week 10 per day) Minnesota (under 16, 60 per week 10 per day), Mississippi (under 16, 58 per week 10 per day), New Hampshire (under 18, 58 per week 9 hours 40 min. per day), New Jersey (under 16, 55 per week 10 per day), New York (under 16 in factory 6 days per week 8 hours per day; under 16 in other occupations 54 per week, 9 per day; male 16 to 18, female under 21, 60 per week 10 per day), North Carolina (under 18, 66 per week), North Dakota (under 16, 60 per week, 8 per day), Ohio (male under 16, female under 18, 48 per week 8 per day), Oklahoma (under 16, 48 per week 8 per day), Oregon (under 16, 6 days per week 10 hours per day), Pennsylvania (males under 16, females under 18, 58 per week 10 per day), Rhode Island (under 16, 56 per week 10 per day), South Dakota (under 18 10 per day), Tennessee (under 16, 60 per week) and Wisconsin (under 18,

in cigar factory 48 per week 8 per day; under 18 in any other, 6 days per week 10 hours per day).

To enumerate the many occupations prohibited to children in the various states would take too much space. The prohibited occupations to children of certain ages generally include the dangerous, injurious, unhealthy, acrobatic, mendicant, immoral, hazardous, standing, manufacturing, mercantile, mechanical, workshop, and many states have a general prohibition for any gainful employment (34.132). "The laws as to labor in mines are naturally more severe; although in some they are covered by ordinary factory laws (Colorado, Florida, Iowa, Kansas, Kentucky, Louisiana, Michigan, Minnesota, North Dakota, Oregon, South Carolina, South Dakota, Tennessee, Vermont, Virginia, and Wisconsin). Female labor is absolutely forbidden in mines or works under ground in Alabama, Arkansas, Illinois, Indiana, Missouri, New York, North Carolina, Oklahoma, Pennsylvania, Utah, Washington, Wyoming and West Virginia—in short, in most of the states except Idaho, Kansas, Iowa, Kentucky, Virginia, Wyoming, where mines exist; and the limit of male labor is usually put at fourteen (Alabama, Arkansas, Idaho, Indiana, Missouri, Ohio (fifteen during school year), South Dakota, Tennessee, Utah and Wyoming), to sixteen (Illinois, Missouri (of those who can read and write), Montana, New York, Oklahoma, Pennsylvania and Washington); or twelve (North Carolina, South Carolina and West Virginia), even in states which have no such legislation as to factories. The laws as to elevators (Indiana, Massachusetts, New York, Rhode Island, Kansas and Oregon), dangerous machinery (Connecticut, Iowa, Missouri, Oregon, Louisiana and New York), or dangerous employment generally (Illinois, Kansas, Kentucky, Massachusetts, Michigan, Minnesota, Missouri, Montana, New Jersey, New York), Ohio, Oklahoma, Pennsylvania, and Wisconsin), are even stricter, and as a rule apply to children of both sexes; the Massachusetts standard being, in the management of rapid elevators, the age of eighteen, in cleaning machinery in motion, fourteen, etc.; sixteen to eighteen in Indiana, Iowa, Louisiana, New Jersey, New York and South Carolina. The labor of all women in some states, and of girls or women under sixteen or eighteen in other states, is forbidden in occupations which require continual standing Illinois (under sixteen), Michigan (all), Minnesota (sixteen), Missouri (all), New York (sixteen), Ohio (all), Oklahoma (sixteen), Wisconsin, sixteen), Colorado (all over sixteen). Females in Iowa, Louisiana, Michigan, Missouri, New Hampshire, New York, Vermont, Washington (except wife of the proprietor or a member of the family), or minors in Arizona, Connecticut, Georgia, Pennsylvania, Idaho, Maryland, Michigan, Missouri, New Hampshire, South Dakota and Vermont, or young children in Florida, Illinois, Massachusetts, Missouri and Nebraska, are very generally forbidden from working or waiting in bar-rooms or restaurants where liquor is sold, and in a few states girls are prohibited from selling newspapers or acting as messengers (New York, Oklahoma and Wisconsin). The Northern States have a usual age limit for the employment of children in ordinary theatrical performances, and an absolute prohibition of such employment or of acrobatic, immoral, or mendicant employment. But in some states it appears that there is only an age limit as to these (California, Kentucky, Maine, Maryland, Michigan, Missouri, Montana, New York, Oregon, Rhode Island, (sixteen years); Colorado, District of Columbia, Florida, Illinois, Kansas, New Hampshire, Virginia, Wisconsin, Wyoming (fourteen); Connecticut, Georgia (twelve); Delaware, Indiana, Louisiana, Massachusetts, West Virginia (fifteen); Minnesota, New Jersey, Pennsylvania, Washington (eighteen). The hours for railroad and telegraph operators are limited in several states, but rather for the purpose of protecting the public safety than the employees themselves (Colorado and New York). The following other trades are prohibited to women or girls: Bootblacking or street trades generally (District of Columbia and

Wisconsin); work upon emery wheels, or wheels of any description in factories (Michigan); and in New York no female is allowed to operate or use abrasives, buffing wheels, or many other processes of polishing the baser metals, or iridium. Selling magazines or newspapers in any public place, as to girls under sixteen (New York, Oklahoma, Wisconsin), public messenger service for telegraph and telephone companies as to girls under nineteen (Washington)" (39.225,-6).

(20) Rights of the Child

"Legislation always means an attempt to define and express rights which society is ready to recognize, guarantee, and make universal in their application. Among the more important rights of childhood that are now generally given legislative protection are: (1) The right to be well born. (2) The right to parental name, support and protection. (3) The right to leisure, play, and recreation. (4) The right to education. (5) The right to exemption from work, until physically and mentally equipped for the specific tasks with which the work life may properly begin, and, for a longer period the right to protection from any temptation to enter upon extra-hazardous or dangerous trades or to work under conditions inimical to health and morals. (6) The right to protection from inhumane treatment. (7) The right to protection of health and morals. (8) The right to a chance in a decent environment, both physical and social, when guilty of any infraction of the law" (36.621). Most of these rights have been discussed in the preceding pages There are many other privileges and disabilities that the law confers. In Oliver vs. Houdlet, 13 Mass., 237, Justice Wilde said, "In all cases the benefit of the infant is the great point to be regarded; the object of the law being to protect his imbecility and indiscretion from injury, through his own imprudence or by the craft of others." "Hence, although the infant may avoid his contract, yet it is binding on a person of full age who contracts with him. Every person deals with an infant at arm's length, at his own risk, and with a party for whom the law has a jealous watchfulness" (46.10). Some contracts bind the infant, or minor as we shall call him henceforth. A minor's contract to marry, his contract for necessaries for himself or his wife and children, and his contract to enlist seem to be binding. The prices he will have to pay for necessaries, will not be what the merchant charges but what the necessaries are reasonably worth. "Of course food, clothing and house rent, especially if the minor is a young man who is married, are necessaries. Dentist's bills for filling teeth, and even a watch and chain, have been judicially held to be necessaries for certain well-to-do lads, who, after running up these bills, refused to pay them. More unhandsome still was the con-

duct of the youthful Kentucky bridegroom who tried to elude payment for his wedding suit of clothes, on the ground that it was a luxury and not a necessity. But he, and the young Englishman who bought a wedding present for his bride and then tried to escape paying for it, found that the jury considered these things necessaries and not luxuries. On the other hand, cigars and tobacco, wine suppers, and diamond and ruby cuff-buttons worth $60 apiece, are held in law to be luxuries, and in no possible way necessaries for any minor; not even for fashionable young men in college who wish to lead their 'set'" (15.84-5). The safest rule in business transactions seems to be for the adult to deal with the minor's parent or guardian. Of course a minor can take and hold property of all kinds during minority but the vendor or grantor is usually liable to have the minor refuse to confirm the sale or conveyance on attaining full age. There are so many conflicting decisions on this whole subject that "the layman, who is his own lawyer usually has a fool for a client." What has been said on this topic applies to the minor, who has property in his own name and who is not living at home. Ordinarily, if the minor has property of his own and his father is not so fortunately circumstanced, the minor's support can be made a charge on the minor's property. But this whole subject has been so diversely regulated by statute that it seems impossible to frame a short rule that will be found universal. The husband or father who fails to provide reasonable support and maintenance for his wife and minor children can be punished by a fine (in Massachusetts and other states payable to the wife) or imprisonment.

The child adopted is usually not related by nature to those assuming the legal relations of maternity or paternity, and "the consent of the child or other person to be adopted must in most states be obtained if such person be over fourteen years of age or over twelve years in the states of New York, California, Nevada, the Dakotas, Idaho and Arizona. Generally any woman being an inhabitant of the state and twenty-one years of age may adopt. The adopter must be forty years of age in Louisiana; competent to make a will in Iowa. If the adopter has a wife or husband, he or she must consent or join in the petition or other instrument, if competent, in the states of New Hampshire, Massachusetts, Maine, Vermont, Rhode Island, Connecticut, New York, New Jersey, Ohio, Illinois Michigan, Wisconsin, Minnesota, Delaware, Kentucky, Missouri, California, Oregon, Nevada, Colorado, Washington, the Dakotas, Idaho, Utah and Louisiana. In Massachusetts and Louisiana the person adopted must be younger than the person adopting; and it must be a child in the States of New Hamp-

shire, Maine, Rhode Island, Pennsylvania, Illinois, Wisconsin, Minnesota, Nebraska, Delaware, Missouri, Oregon, Nevada, Colorado, Utah, Alabama, Florida, Louisiana, and the Territory of New Mexico. No woman can adopt her own husband in Massachusetts; or her own child in Illinois, Wisconsin, Iowa, Minnesota and Washington; a brother or sister, whether of the whole or half blood, or an uncle or aunt in Massachusetts; nor in Louisiana can a man adopt his illegitimate children, whom the law prohibits him from acknowledging. By the law of the state of Nevada no mongolian can either adopt or be adopted. It would seem by the law of Illinois that only an orphan can be adopted, or a child both of whose parents have deserted it for at least one year. In New Jersey, Idaho, and Louisiana the person adopting must be at least fifteen years older than the person adopted, and at least ten years older in California, Nevada, and the Dakotas. In North Carolina an adoption may be made either for life or during the minority of the child (5.50-2).

A digest of the apprentice laws of the states will be found in "The apprenticeship System in its relation to Industrial Education" by the late Carroll D. Wright, President of Clark College, Worcester, Massachusetts, United States Bureau of Education, Bulletin, 1908, No. 6. (47.) "Besides the general power of a parent to bind his infant child as an apprentice, an orphan whose estate is insufficient for his support, or an infant pauper, whether an orphan or not, may be apprenticed by the overseers of the poor or other similar officers" (11.3.542). In some jurisdictions, as in New York, an infant may bind himself, while in others this power is denied. The usual rule is to require the child's consent to his apprenticeship.

In the United States the child's capacity to make a will is looked upon with disfavor according to the following: "Modern legislation repudiates largely the wills of all infants, male or female, with obvious disfavor. And the latest enactments of the majority of American states are to the same purport, establishing the age of twenty-one as that at which a person of either sex ceases to be disqualified from making a will of either real or personal estate. States still vary in provisions, however, concerning the testamentary capacity of infants. Eighteen years is sometimes taken as the testamentary age for both males and females; while various codes adopt a still earlier standard of discretion, distinguishing in some instances between males and females, or even between females married and unmarried. Sometimes, too, the line is drawn between the kinds of property, so that an infant's personality but not his real estate may be disposed by testament before he reaches the age of twenty-one" (33.21).

The code of Georgia, Seventh Title, Chap. 2, Art. 1, 3265 reads "Infants under fourteen years of age are considered wanting in that discretion necessary to make a will." In New York, a female at 16 and a male at 18 can dispose of their personal property by will.

(21) Rights of Parents

The parents have the natural right to the control and custody of the child. The common-law rule was that the father's right to custody of a legitimate child was superior to that of the mother. But the common-law rule has been modified in most, if not all, states. "General rules cannot be laid down for the determination of cases affecting the custody of infants, there can be no legal standard by which the courts must be governed. The general result of American cases may be characterized as an utter repudiation of the notion that there can be such a thing as a proprietary right or interest in or to the custody of an infant. The terms "right" and "claim," when used in this connection, according to their proper meaning, virtually import the right or claim of the *child* to be in that custody or charge which will subserve *its* real interest" (20.22). Colorado, Connecticut, Idaho, Kentucky, Maryland, Massachusetts, Minnesota, Mississippi, Montana, New Hampshire, New Mexico, New York, Ohio, Oklahoma, Rhode Island, South Dakota, Texas, Vermont, Washington and Wisconsin allow a married woman to be appointed guardian of her own or other people's children, to have charge of their persons and property, even though she lives with her husband. In Arkansas, Missouri and Utah, she can be appointed guardian of a child's person only and in California of its estate. In New Jersey she and her husband may be jointly appointed (15.91). Statutes in every state provide for the support of the child by the parent, and when the child is an orphan, statutory provision exists in some states for his support by the grandparents, if they have sufficient means. The marriage of a minor daughter excuses her father from supporting her as that is one of the duties assumed by her husband. In all cases where a child has property, the parent before using the property, even for the child's benefit, should apply for permission to the proper court. If the parents have custody of the child, the child's earnings belong to the parents. "Under some statutes the parent, if he intends to claim the child's earnings, must notify the child's employer, and in absence of such notice payment to the child is valid and he has good title to the money" (11.29.1624). The parent may emancipate the child by "giving him his time," and "the effect of this is to throw the child upon his

own exertions for support and legally absolve the father from further obligation" (15.76).

Religious Convictions. The peculiar religious convictions of a father form no ground for removing the child from his custody, nor does a father forfeit his right to custody of his child by being or becoming an atheist. But where a father belongs to a sect which entertains opinions, obnoxious to society, adverse to civilization, opposed to the usage of christendom, and in some respects contrary to the express commands of the Bible, the court will not award him the custody of the child. In determining the custody of a child as between persons other than parents the court regards its temporal welfare as paramount to questions of religious doctrine; but the child will be delivered to the custody of persons of its father's faith if its temporal interest will be as well conserved by the custody of such persons as by that of others of a different faith or indifferent in religious matters" (11.29.1600).

(22) Majority

At common law all persons under twenty-one are infants or minors but this rule has been modified in some states by statute. The age of majority in some states is eighteen years for married females while in other states eighteen is the age of majority for all females, and in Utah all minors attain majority on marriage. Provisions in some states are made whereby a minor can be relieved of legal non-age by the court. The statutory provisions as to majority follow: Alabama (21, except married females; over 18 may be relieved of non-age by the court), Alaska (21 except "all female persons when married according to law"), Arkansas (males 21, females 18), Arizona (males 21, females 18), California (males 21, females 18), Colorado (males 21, females 18), Connecticut (21 for all persons), Delaware (21 for both sexes), District of Columbia (males 21, females 18), Florida (21 non-age may be removed by court over 18), Georgia (males and females 21), Idaho (male 21, female 18), Illinois (male, 21 female 18), Indiana (21), Iowa (male 21, female 18, and also attains majority by marriage), Kansas (21 male, and female 18), Kentucky (21,) Louisiana (21), Maine (21), Maryland (males 21, females for most purposes 18), Massachusetts (21), Michigan (21), Minnesota (males 21, females 18), Mississippi (21), Missouri (male 21, female 18), Montana (males 21, females 18), Nebraska (males 21, females 18), marriage ends minority of female), Nevada (male 21, female 18), New Hampshire (both sexes come of age at 21), New Jersey (21), New Mexico (21, guardianship over both ceases on marriage), New York (21),

North Carolina (21), North Dakota (males 21, females 18), Ohio (male 21, females 18), Oklahoma (males 21, females 18), Oregon (males 21, females 18), Pennsylvania (21), Rhode Island (21), South Carolina (21), South Dakota (males 21, females 18), Tennessee (21), Texas (21, females 18 also becomes of age on marriage), Utah (males 21, females 18, all minors attain their majority on marriage), Vermont (male 21, female 18), Virginia (21 for both or when female marries), Washington (males 21, females 18), West Virginia all persons (21), Wisconsin (males 21, married women over 18), Wyoming (males 21, females 18 or until they marry).

(23) Summary

1. Federal legislation seems to be chiefly concerned with the alien child. Professor Stimson intimates that the Constitution may have to be amended to make Federal legislation possible (39.215).

2. Each state legislates for the children within its jurisdiction, and there is a wide diversity in the child-laws of the states.

3. It seems to be legally settled "that the legislature must be the sole judge of the expediency of such legislation" (39.215); and "the state is the ultimate parent of the child."

4. Parents and children have been deprived of their natural rights through the legislation of some states. "Indeed, in some Western states it would appear that the general disapproval of the neighbors of the method employed by parents in bringing up, nurturing, educating or controlling their children, is sufficient cause, for the state authorities to step in and disrupt the family by removing the children, even when themselves unwilling, from the home to some state or county institution. Any one who has worked much in public charities and had experience with that woeful creature, the institutionalized child, will realize the menace in such legislation" (39.337-8).

5. The laws on marriage and divorce are not uniform throughout the states.

6. No state has laws regulating the employment of pregnant mothers.

7. Nine states have no laws on the practice of midwifery.

8. Sixteen states have laws requiring cases of ophthalmia neonatorum to be reported. In Connecticut midwives and nurses are liable to a fine of $200 or imprisonment not to exceed six months or both for failure to report in writing within six hours to health officers the fact that one or both eyes of a child has become inflamed, swollen or reddened at anytime within two weeks after birth.

9. The Pennsylvania law relative to vital statistics has been adopted by twenty states and should become universal in this country.

10. The legal status of the illegitimate child closely approximates that of the legitimate child in some states.

11. The New Jersey law on "certified milk" is most comprehensive. (State of New Jersey, Laws of 1909.)

12. Seven states have no compulsory education law. "Throughout almost the entire United States some school attendance is compulsory from 7 or 8 years of age to 14" (36.1.293). Thirty-five states impose penalties on parents for neglect to comply with the compulsory education law.

13. Some states have certain laws, as for example school laws, that minimize the functions of the home, but also emphasize parental responsibility through penalizing provisions.

14. There is a tendency to coddle the child in some states and the absolute prohibition of corporal punishment in schools seems to be illustrative of the tendency.

15. Thirteen states have legal provisions on medical inspection of schools. Four are compulsory laws. They are the laws of Colorado, Massachusetts, New Jersey and Indiana (refers to Indianapolis only). The New Jersey law compels parents to remedy defects. Connecticut provides for the employment of school nurses.

16. The District of Columbia and seven states seem to have no laws on abandoment, desertion and non-support. Michigan has a law that provides if the parent is imprisoned, his earnings if any shall be paid to the family.

17. Sixteen states seem to have no laws regulating exhibitions and employments (not child-labor) of children.

18. Three states seem to have no laws on the publication or sale of obscene literature to children.

19. The District of Columbia and seven states are reported as having no laws governing the admittance of children to resorts.

20. The sale of intoxicants to children is prohibited generally throughout the country.

21. Ten states prohibit the manufacture and sale of cigarettes and cigarette papers. Massachusetts and other states prohibit the sale or gift of cigarettes to minors under eighteen years of age; at least fourteen states prohibit sale of tobacco, in any form, to minor under 16, and Kansas prohibits the sale of tobacco, opium or narcotic in any form to a minor under twenty-one years of age.

22. The legal age of consent to carnal intercourse for a female child varies from ten years in one state to eighteen years in thirteen states.

23. Twenty-three states have enacted Juvenile Court Laws. In the great majority of the states the jurisdiction of the Juvenile Court extends to children of 16 or 17 years of age; in two states to boys 17 and girls 18; in three states it is 18 for both; and in one state 19 for both. In 19 states and the District of Columbia parents or others contributing to the child's delinquency may be punished by a fine or imprisonment.

24. Nevada is the only state without child labor laws. Nineteen states forbid employment of children under 14 in factories, stores, offices, laundries, hotels, theatres and bowling alleys. In six states the labor of a child under 16, in 18 states of a child under 14 and in 8 states of a child under 12 in mines is forbidden. Twenty-three states forbid employment of children during school hours. Night work is prohibited in 23 states under 16, in 7 states under 14 and 2 states under 12. Legislation is tending to prohibit the industrial employment of a child under sixteen.

25. Tendencies that are common in the legislation of a group or groups of states have been noted already in these pages. Broader inferences at this time seen unwarranted.

26. Some states have laws that are inoperative because the legal machinery for their enforcement is lacking; other states, though legally well equipped, are not enforcing laws on their statute books. In every community much depends on the men behind the law. An automatic law has not been discovered in this study.

27. A common result of a disaster or a grave scandal is a new law, which is sometimes so necessary that the wonder is that its need was not met by earlier remedial legislation. Preventive laws should be enacted before great expenditure of life, health or morals make legislation imperative. When a National Children's Bureau is established in this country, preventive legislation will receive deserved attention. Apart from the laws relating to birth registration, midwives, ophthalmia neonatorum, milk, and medical inspection, strangely few preventive laws were found in the legislation of the states.

(24) Suggestions

To be an American citizen in this year of our Lord, one thousand nine hundred eleven, is the greatest privilege on earth—except one, that of the American child, the American citizen of to-morrow. The words of Dr. McCoy, who has given over thirty years to both study and practical work in child-welfare, follow: "Have you ever given a moment to this great thought? The young people of America are the heirs to all the values of the ages, and what a marvellous

heritage that is. They are of a certainty, too, the men and women of destiny. In their hands in a short time will be all the interests of life and those that concern eternity. Religions, system of government, the armies and navies of the world that even now are shaking earth and sea and sky in thunderous throwing of the 'grim dice of the iron game,' the ceaseless breathings of the mighty engines of our industries, the passing ships of commerce, swift almost as the lightning from shore to shore, the courts, the schools, the philosophies, the arts, literature, the knowledge of natural forces and the power of their application—all will be theirs.

"The old or the middle-aged either have finished or are putting the last touches to their life-work. They are up or over the mountain and are going down into the soft glory of the sunset; but the young with glad shout are breasting the eastern hills with all the radiance of a new morning in their eyes and with the fires of a new purpose glowing in their hearts.

"And they must be fitted for their mission. For this reason the citizens come and deliberate together; for this reason they pile the public gold whereby to raise the school walls; for this reason they call scholarly men and women to guide and rule; for this reason have the book presses been groaning in labor this many a year; and for this reason are eager searches of enlightenment going down to the sea, and into the earth, and up in the sky, seeking new truths to bring back for their betterment" (30.11-12).

1. The first suggestion, the need of systematic legislation for children, will not meet with much opposition. Almost every one acknowledges the need of systematization which will preclude "crank laws" and make for sanity in child legislation.

2. The question how legislation for the children of the United States may be systematized is unsolved. The Federal right to legislate for the children of the several states is questioned under the present constitution. Until the Federal right is established by judicial decision or legislative amendment to the constitution, expediency must devise other methods.

A National Children's Bureau, which will do for the entire field of child-laws what the United States Bureau of Education is doing for school-laws, seems essential.

3. And a National Association for Child Legislation would be of inestimable assistance in the solution of the problem. Such an organization might serve to correlate the many independent organizations now urging child legislation. The union of the existing organizations would make a National

Association for Child Legislation a sturdy infant from birth, and the propaganda of the present organizations should become more effective throughout the entire country. A National Association for Child Legislation must be democratic. In this country no organization can succeed permanently and be controlled by any aristocracy—not even an aristocracy of learning. The success of the American Association for Labor Legislation, in one of its chosen fields, that of child-labor, might be studied to advantage by a National Association for Child Legislation.

4. To maintain even the semblance of the primacy of the home, legislation, that minimizes the functions of the home, should also emphasize the responsibility of parents. In some jurisdictions this tendency appears in the school laws and juvenile delinquency laws penalizing parents. It is a principle that should be kept in mind in child-legislation. Dr. Burnham writes: "A few pretty definite practical principles follow from this idea of the primacy of the home in education. They are enforced, too, apparently by the teachings of experience. We may formulate them as follows:

"First, the aim of school education is to supplement the education of the home.

"Second, the best of institutions is a poor substitute for a good home. Other things being equal, put the delinquent or neglected child in a home rather than a school.

"Third, charitable institutions are likely to be successful in the degree in which they approximate in their management the conditions of home life.

"Fourth, schools and other institutions should not as a rule usurp functions that belong to the home. In case this is desirable, it should be done in such a way that it will not be permanently necessary to do so.

"Fifth, teachers should always recognize the authority, the responsibility, and the general expert character of parents in the education of their own children. The numerous exceptions to this can be treated all the better by one who recognizes this general truth. On the whole, perhaps we may say that parents are not much more inefficient than we teachers, and certainly we can learn much from a child's parents in regard to the best methods for his education.

"Sixth, for the child's misdemeanors the parents as well as the child should be held responsible. This is coming to be recognized in child legislation, as, for example, in the Colorado law." (8.487.)

5. The welfare of the child and the parents demand that the home shall not be eliminated except as the last resort. The Pennsylvania Society is another that has come to share

"the modern economic thought that the normal condition of the child is in the home, even though the home be a poor one; the children often help their parents to reform, and the father and mother can in many cases be made to realize and feel . . . that upon them is the burden of responsibility to see that their children do not become in any sense a charge upon the community. Its belief in this theory is evidenced by the fact that in the year just closed 1,522 cases have been 'passed' over to what is technically known as 'supervision' cases, in which, perhaps, on the first visit the breaking up of the family seemed justifiable. Endeavors have, therefore, been made in every case to preserve the family as a whole. The results obtained by the visitors and agents in this work of reconstruction have been beyond belief" (31.143). And Dr. Chamberlain adds the following: "Indeed whatever can create a home environment, or something closely approximating to it, must be beneficial, as it is the most human method of 'reform' or 'regeneration'" (9.1.629).

6. As well intentioned but over-indulgent parents sometimes rear "the spoiled child," legislation that tends to coddle the child should be discussed for at least a year before its enactment.

7. The report of the Committee of the Commissioners on Uniform State Laws Entitled "An act relating to and regulating marriage and marriage licenses; and to promote uniformity between the state in reference thereto" (1.1130-1153), should be read by every legislator.

8. The recommendations of the Commissioners on Uniformity relative to migratory divorce and to divorce procedure and divorce from the bonds of marriage are deserving of serious consideration (39.323-324).

9. The "Act relating to desertion and non-support of wife by husband, or of children by either father or mother, and providing punishment therefor; and to promote uniformity between the states in reference thereto" (1.1179-1181), provides in Sec. VII for the payment "for the support of such wife, child or children, a sum equal to . . . for each day's hard labor performed by said person (the husband or father) so confined," and is an act that seems worthy of adoption throughout the Union.

10. Some statutory provision should be made in all states relative to the employment of mothers before and after childbirth.

11. Legislation should be enacted making it criminal to advertise any illegitimate child for adoption without first receiving permission from the State Board of Charity.

12. The school age should be raised so that any child under seventeen, who is neither attending school regularly or working, could be required to attend some school. Industrial schools or special schools would be required for this class. While statistics from a single city are far from establishing a norm, the writer's study of Juvenile Delinquency in Worcester, Massachusetts, may be of interest in this connection.[1] From June 1, 1907, to April 1, 1910, sixty-five per cent. of the boys and sixty-eight per cent. of the girls arrested for delinquency were between fourteen and seventeen years of age. There were 493 boys and 32 girls. Of the boys, 67 were attending school, 191 were working, and 236 or 49.7% were neither attending school or working, "just loafing around." Among the girls 22 girls or 68.7% were also "loafing," 9 girls were working and only one girl in the group was attending school. Both the boys and girls who were "loafing" were before the court for the more serious offenses.

Relative to the need of day truant schools in this country, in the same study 85% of the Worcester boys and girls in the Lyman School at Westboro and the State Industrial School at Lancaster stated that a connection existed between their own truancy and their own delinquency; and the majority of delinquents of school age studied were also truants.

13. Each child attending school should receive a physical examination at least once a year under the direction of an occulist, aurist, physician and dentist, and legislation should be enacted compelling parents to take reasonable remedial measures.

14. Laws should be amended to enable authorities to have supervision over all female school offenders until their majority is reached. In some jurisdiction this class of girls must be released at the age of fourteen and they return to environments that are sometimes especially dangerous at that age. These girls are really "neglected children." Relative to this age, President Hall writes: "In fine, puberty for a girl is like floating down a broadening river into an open sea. Landmarks recede, the water deepens and changes in its nature, there are new and strange forms of life, the currents are more complex, and the phenomena of tides make new conditions and new dangers. The bark is frail, liable to be tossed by storms of feeling, at the mercy of wind and wave, and if without chart and compass and simple rules of navigation, aimless drifting in the darkness of ignorance, amidst both rocks and shoals, may make of the weak or unadvised, wrecks or castaways" (17.507-8). Again President Hall says, "Caldo

[1]Juvenile Delinquency in Worcester, Massachusetts, by Thomas C. Carrigan, No. 54, 562, Library Clark University, Univ. Case C. 316.

finds that most prostitutes fall between the ages of fifteen and eighteen, which he terms the period of sexual vulnerability toward which chief effort should be directed." (17.431.)

15. Parents, when of sufficient means, should pay a reasonable amount for the support of their delinquent children confined in corrective State Institutions.

16. Superintendent of Institution, Chief of Police, Superintendent of Schools and Juvenile Probation Officer of the child's city or town, or a majority of them should have power at any time to release from any corrective institution any child not committed for a felony.

17. In order to give an opportunity to the working public, which is unable without loss of pay to meet the school authorities during the day, legislation should require the following offices in all cities to be open at least one evening in each week:

(1) Office of the superintendent of schools
(2) Office of the truant officer
(3) Office of the principal of all large grammar schools.

18. To better acquaint the teacher with the child's disadvantages out of school, legislation should provide that each teacher should be allowed to visit, *during the hours school is in session*, the home of each pupil at least once a month during the school-year. Teachers, generally, are overworked and underpaid, and the writer would be the last to suggest the imposition of another "fad." The suggestion on this page was born from investigating the unheralded and noble work of a woman principal. That her visits to the homes of her pupils have unmeasureably benefited both pupils and parents, many can testify; and that her teaching has steadily gained in common-sense tempered by sympathetic insight is the report of an expert, the writer has not the honor of her acquaintance. The divorce of the school and home is almost absolute in many places. Rarely any mother visits the school except to discuss discipline in some extraordinary case. Fathers are seldom visitors, and that is not surprising when it is remembered that most fathers would have to lose a part of a day's wages to visit school. The home and school are strangers too often as far as parents and teachers are concerned. This suggestion aims at making parents and teachers acquaintances, and then friends, in hope that both will mutually profit.

19. Records of all absences without excuse should be kept by every principal.

20. Every principal should be supplied with the name, age and address, and the school attending of every child of school age in his district.

21. Co-operation of school and police departments on truancy seem advisable in some places..

22. A juvenile census should be taken annually in cities and towns.

23. Every city should establish a free employment bureau for the purpose of securing positions for children above the school age, who need employment. To-day much is being said and written about vocational training. In most cities, when the working boy and girl, no matter how deserving, leave school, they must find their own positions and they generally take what they can get. This tends to make "misfits." The suggested bureau could have on file the names of employers in shops, stores, etc., who want worthy young people in their establishments. Think of the moral lever that the recommendation of such a bureau might be to the minds of the older school children, who are looking forward to "a good job." If diplomas, medals, etc., have been effective in moral education, it seems that the prospect of "a good job" at the end of school-life might be made at least as potent with the American child.

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THE PLACE OF REASONING IN TEACHING

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A study of the history of communities shows that development has proceeded very largely along lines conditioned by the problems confronting the people. The colonist came to America to solve certain problems. Others promptly confronted him demanding solution whether he would or not. Among these were the problems of food, shelter, clothing, government, labor, and relations with the Indians.

Solving these led to the acquisition of much valuable knowledge and raised other problems more numerous still. Out of the stimuli supplied by these problems came much knowledge of the geography of the country, its resources of animal and plant life, the peculiarities of its climate, and the habits and methods by which the Indians solved their problems. The problems of food and clothing led to the establishment of industries in the homes and to the many problems connected with these; to the problems of the farm and village; and to devising ways and means for their solution.

We may study the lives of these people from many different points of view. The geographical conditions must be understood if their activities are to be understood. Mathematics can give another point of view of their activities. In the field of literature their pleasures and sorrows are viewed. History relates and explains the problems that arose and how they were solved. Art and music throw many sidelights on the periods studied. Sociology also has its way of looking at the same life and activities.

Most of the problems of life were solved in the individual homes at one stage. But there came a time when problems had increased to such an extent that specialization became a necessity. The same story is repeated over and over when one reads of the development of transportation, of farm machinery, and of machinery necessary for the home, office, mill, and factory. In each case there were one or more problems which, left unsolved, meant the increase of inconvenience, suffering, and expense. Often one problem solved seemed but to make more necessary the solution of others until necessity seemed to be like a demon never satisfied. Remarkable illustrations of this are numerous in the history of transportation and steam engineering.

It is interesting to note how the evolution of one machine has had far reaching results, notably in the case of the harvester. Instead of decreasing the amount of labor there has come a greater demand for *skilled* labor. The problem of the relations of labor and capital has become more complicated because of it. It has greatly influenced the problems of transportation, banking, milling, and the storing of the grain. Indeed problems political, social, industrial, and educational have all been complicated by the evolution of this machine. It is also true in regard to this machine as in the case of all others that there are yet some unsolved problems relating to it individually.

The evolution of various lines of business presents similar stages. In this it is interesting to note the lateness with which certain lines have developed. Those more necessary for the general welfare came first. Banking came very late. Its prosperity is conditioned by the prosperity of all of the others. It is to business what mathematics is to other fields of knowledge.

Other motives besides necessity have played a part in progress. Among these have been love of knowledge, curiosity, ambition, desire for fame, and service.

Finally progress has been conditioned by inheritance, environment, and the initiative of the people themselves. The play of these has presented a series of problems. These have always consisted in a more or less complicated situation, made up of facts, some of which are active forces of a greater or lesser degree of intensity, others are static, playing little or no part in the working out of the situation.

It has been quite impossible to tell when problems of a given period have been finally solved. Each generation has generally found the old ones arising, though under conditions somewhat changed, *e. g.*, the labor problem. Solutions with reference to the times have generally been necessary.

The value of any given solution has been conditioned upon the success with which it has met the imperfections and inconveniences that made up the problem. Readjustment to new conditions has often worked many hardships. This has meant the problem of the preservation of plasticity to a yet later period of life. Success in the solution of problems has proven an inspiration to further efforts, to persistence, self-confidence, and self-reliance.

If some application of these points is made to the existing methods of instruction there confronts us the current neglect of the significance of the problem in securing results. Fields of knowledge are presented as classified, organized, systematized, separated from each other, and with very few oppor-

tunities for other activities of mind on the part of the pupil than that of memory. It is not uncommon to find pupils in both school and college feeling that they have "finished" certain subjects. Many leave school because there is no future there visible to them. They do not know how to solve problems and they do not know any problems needing to be solved. Interest and inspiration have gone in consequence.

In the evolution of knowledge there have become necessary readjustment of habits, the formation of new associations and habits, the careful analysis of situations to be dealt with, the selection and reorganization of significant facts, the devising of ways and means to deal with them, the use of analogy, the generalization of laws, the discovery of the hidden principles explaining the more superficial law, and the use of principles and laws for guidance, explanation, and inference in dealing with the facts of situations. With the ever increasing body of knowledge have come a larger outlook and a greater facility in the use of mental powers.

One recognizes the foregoing as having been generalized as the method of science,—a method, however, by no means limited to the fields of science. Science recognizes first of all the presence of a problem, something about which thought must centre, something for which there is in the mind of the student a definite motive acting as an incentive for the solution of the problem. It is of this that the logics make no mention.

It is quite possible for one's first touch with a field of knowledge to lead to nothing more than a superficial acquaintance with the miscellaneous facts of the field. One may be interested in the beauties of the sunset, in the change of the foliage, in the surf at the seaside, and no question may arise in his mind in regard to the forces at work in either situation. Yet if actually confronted by a problem of either field which he must solve, his interest in that field may broaden and deepen. But interest often suffers arrest in the superficial stage.

With problems presenting themselves and demanding solution, progress is assured. In these it is, first, important to secure the facts of the situation clearly. This fact getting stage has often been designated as the descriptive or narrative stage. It may be either or both in a varying proportion.

In this the teacher's problem is one of inspiring pupils for the work, in directing the work, not, in doing it; in teaching the arrangement of facts, with due regard to action, color, interest, sequence, contrast, and the subordination of the less important.

Various errors are likely to be made in dealing with the fact stage. One may fail in exactness appropriate for the

subject in hand, in the suitable degree of detail; and penalties for this failure may grow out of the results obtained and so make one more considerate in the future. Too great wealth in details may serve to obscure the important points in the situation.

A large majority of facts, laws, and principles must be taken at second-hand. Dependence upon others seems only likely to increase, and it therefore becomes important to establish standards and guiding principles for testing the reliability of testimony in whatever form it may be presented to us. Sooner or later people become chary about accepting all that the daily paper has to offer. Past experience has biased some writers on some subjects. Some writers have never learned the art of exact observation. Others seem never to have had any great regard for truth. We have little patience with the writer who evidently knows little about his subject, but much regard for the man well trained who offers information on subjects in his own field. The memory of the best in regard to a series of events of a dozen years since shows a strong tendency to confusion. Again gaps in the memory of a long gone series of events are likely to be supplied by the imagination, and hence the importance of memoranda made at the time of the events.

The terms observation and analysis need to be more carefully used. This, however, seems to be true of all of the terms used in connection with reasoning. To be a good observer does not mean the possession of an all-round power. One observes according to his interests, training and habits. The good observer sees facts in their significance. He is the better observer after careful training. Analysis seems to refer to the breaking up of a situation into its individual facts. In the early stages of a subject one needs to gather all possible facts that seem in any way associated with the subject in order to sift and determine what the important ones are.

The Analogy. No matter how young or how old one is, when he has passed through or is familiar with an experience of a given kind, he feels competent to some degree to deal with another of a similar kind. The first is suggestive for guidance, explanation, or inference, in the case of the second. Through the accumulation of experiences one begins to sense uniformities or laws without necessarily having any grasp of the forces producing these. It is perhaps difficult to draw the line between analogy and generalization. Very much of the world's thinking seems often to be done with reference to resemblance to some one experience. Generally speaking the analogy is concerned with but one past experience and one in hand. It is used very freely by both children and adults,

often regardless of the fact that its unguarded use leads to many mistakes. It is necessary to consider the significance of the points of resemblance and difference. The second experience may vary from the first in only one point but the importance of that one may be so great as to prevent the first having any bearing on the second.

Generalization and Induction. Generalization refers to seeing and stating the fact or facts in common to a number of given situations or experiences. From this come definitions, laws, general notions, proverbs, etc. The value of the generalization may be great or small. It depends upon the generalization. This may be of some wholly passive fact in situations. It may be of coincidence. It may be of some feature that should always be taken into consideration, *e. g.*: a hot stove will burn; Mr. A. is always disagreeable before dinner; certain foods uniformly "disagree" with B., etc. In all of these the reasons for the uniformities may be wholly unapparent.

Induction is the search for the hidden forces producing the uniformity. The statement of the method by which these forces produce the result is the principle. There is much confusion of the use of law and principle. The value of knowing the hidden forces and their methods of work is often the value of life and property. Money could hardly have repaid Pasteur for his discovery of the means by which disease is spread. The need for the discovery of hidden causes arises in business, professions, industries, and indeed in all callings, and with great frequency. While children cannot be expected to rediscover every law and principle needed, it would seem that training in this kind of thinking ought to have a place in their school work.

Just how many illustrations are necessary before one should attempt to formulate his generalization whether it be definition, law, or what not, is not easy to say. Even to the adult what are long established definitions and laws must often be modified to conform to new usage, discovery, or other social change. Taking too few illustrations means that one is likely to find certain things true of them, not true of a larger number. Perhaps the medium course is best in this as elsewhere. It must be expected that all generalizations will first be seen in a limited sphere, and that they will be extended and modified with experience.

Induction calls for both the discovery and the testing of the hidden principle. This is done by the methods of agreement, difference, the joint method, variation, and residues. The joint method is the use of the first and second together. The method of residues is so rarely used in the grades that its consideration may seem needless. Yet high school and college

make large use of this method. The grade teacher will need much facility in the use of the methods of agreement, difference, and variation.

Generally in induction one uses first of all the method of agreement, but not necessarily. This method comes in close touch with the generalization. The inquiry is for the thing, fact or facts uniformly associated with the generalization in all cases available for examination. The inference from this association is that the possible cause has been found for the generalization. However one may have found only a coincidence. To test this it is necessary to make use of the method of difference, variation, or both if possible. When cases of yellow fever occurred there were mosquitoes uniformly present. The question promptly came: "Where the mosquito is absent are there no cases of fever at all?" This question embodies the fundamental idea of the method of difference. Had it been possible to find cases where the mosquito was absent, other causes would have been probable. Lastly came the question: "Do cases of the fever vary in any degree with the frequency of the mosquito?" When the answer to this had made the mosquito seem to be the cause, it was finally decided by showing how the mosquito carried the germ and by instances in which it had been seen to do so.

The method of difference is occasionally usable in the absence of both of the others. The method of variation is very frequently usable in the absence of the others. If the variation can be stated in mathematical terms the certainty of the causal relation is greater.

The complexity of the situation may be so great that the discovery of the principle for explanation may be far beyond the student. Even Darwin had in some of his problems to acknowledge that he could not find the explanation, and the medical world is yet baffled in regard to the problems of cancer and infantile paralysis.

So many forces are at work in many of the situations confronting one, and often so many of the facts are inaccessible, that it is not possible to reach an accurate conclusion. The element of probability in such cases must be recognized and its degree stated if possible. It is present in every phase of the general business of living. The business man, be he never so successful, cannot tell exactly how much of any given kind of goods will be demanded of him during the season.

The method of residues has been generalized in the algebras under the heading of "elimination." Problems in elimination present situations in which the same two or more unknown quantities appear and reappear in definitely varying proportions. It becomes necessary to state these situations in terms

of equations and to combine them so that one of the unknown quantities will disappear. One may eliminate by addition, subtraction, comparison, and substitution.

Deduction. This phase of thinking deals with problems whose laws and principles are available either from one's own experiences or from the experiences of others.

An analysis of the situation suggests the class of problems to which the one in hand belongs. This is the fact stage,—description or narration. The principles bearing on such situations show how these facts came to be, *i. e.*, explains them; or, second, what one should do in dealing with them for the desired end in view; or, third, what the outcome is likely to be in regard to the forces active in the situation. This finds illustration in the work of the physician. From observation of the symptoms he classifies the disease. His knowledge of the laws and principles of the disease enables him to explain how the patient contracted the disease; second, they guide him in dealing with the disease; and, third, they enable him to infer the length of time the patient will be ill and also the probable outcome of the disease.

Errors in this phase of thinking, as elsewhere, consist in not seeing clearly the facts of the situation, and also in the misuse of the laws and principles. Certain habits, personal likes, and dislikes are all likely to interfere.

The Composite Phase. The thinking that must be done most frequently involves two or more of the foregoing phases in an ever varying proportion and frequency. It may relate to one's ordinary routine or it may reach out to the constructive thinking necessary for the solution of the complex problems of invention, business, engineering, administration, home making and keeping, acquisition and organization of knowledge, etc.

The imitator can deal with the problems of to-day as long as they are like those of yesterday. It is analogy that holds so large a sway in such cases. The constructive mind is not thus hampered. It sees not only the facts to be dealt with but the end sought, and, gathering from many sources, selects with reference to the desired result, organizes, modifies, and gains credit for originality or inventiveness. A principle supposed to be limited in its use is tried in some new field and found to work well. There is nothing in the inventive type of mind which good teaching cannot develop.

From the suggestions thus far offered the following types of lesson plans suggest themselves:

1. The plan for description or narration or both in varying proportion.
2. The analogy for guidance, explanation, or inference.

3. The plan for generalization of laws or definitions, and the discovery of the forces at work to cause uniformities.

4. The plan involving the use of laws or principles for either guidance, explanation, or inference in dealing with problems.

5. A composite plan involving the use of two or more of the foregoing in varying proportion.

The following is suggested with reference to application in the school.

A plan of battle must be made with reference to the battle to be fought. Ready made plans of battle would be absurd. The plan has always to be modified in one or more details before the battle is over, but this does not do away with the necessity for a carefully thought out plan.

Similarly in teaching, the plan must be thought out with reference to the class to be taught. Yet it often will become necessary to modify the plan while the lesson is in progress. This is proper but is not suggested to excuse wandering of thought in either teacher or pupil. Indeed one of the large responsibilities of the teacher is to hold the class to the discussion of the work in hand.

School grades vary so much that it is not possible to offer illustrative plans always suitable. The teacher's skill and resource will always find abundant opportunity for exercise in making a plan to fit the situation in hand.

As a theme for a lesson it is always important that a definite problem be stated briefly, clearly, and accurately. It is important also that the pupil see some use for the knowledge and power that will be gained by the mastery of the problem. Definite directions for study should follow the statement of the problem. These should include statements of the general lines along which preparation should proceed,—suggestions as to the thinking which should be done, the books, and other material that are to be consulted or prepared.

Ideally one should work towards recitation by topics, but one condition for doing so is that the teacher become an expert in organization of subject matter and in questioning. All vague, hazy, or indefinite questions should be omitted always. When the teacher knows the subject in hand thoroughly there is less likelihood of these types of questions being used. Questions that can be answered by yes or no ought always to be omitted by the beginner and rarely used by the older teacher. Certainly all questions that admit of guessing the answer, those that are needless, and those that wander from the subject have no place in the recitation. However, the teacher will sometimes meet the unusually timid who must be helped to

self-confidence at times even by questions that contain the answer.

What questions should be asked is conditioned by what the teacher wishes. If this is clearly in mind the selection of the right question is largely determined.

Questions should be phrased in direct, simple language. Rarely is the complex sentence in place in a good question. Illustrations of suitable questions are offered in the plans that follow.

I

A plan for the descriptive study of the surface, soil, drainage and coast line of the Chesapeake Bay basin.

We shall need this information in order to understand more fully the problems the people of this region have had to meet, how they have had to meet them, and how they are solving them to-day.

In preparing the lesson make use of the relief maps, the descriptions given in your texts, and of the pictures and descriptions in the books on the "reserved shelf" in the library.

Examine the mountains in regard to their arrangement, the distance of the chains apart, the variations of the system in height and width, the two kinds of valleys, and their relative numbers. Trace two routes through the mountains suitable for travel.

Examine the pictures of these mountains. Think of them as once covered with forests entirely, and with much tangled undergrowth, as inhabited at one time mainly by wild animals and Indians, and as being largely unknown and mysterious.

Examine the slope east of the system and note how its width varies, the degree of the slope, the location of the "fall line," and the peculiarities of the surface on both sides of the line.

Observe the direction of the rivers, their frequency, their navigability, and locate the Potomac, the Rappahannock, the James, the York, and the headwaters of the Ohio, Tennessee, and Cumberland. Compare the rivers east of the bay with those on the western side.

Find out how the soil varies in quality and kind.

Examine the varying dimensions of the bay, its direction inland, its navigability, its harbors, its protection from the ocean storms, and its fisheries.

After having next studied the climate we shall try to see how these conditions affected the occupations and history of the people.

While it is possible to have nothing but description in geography lessons, it is frequently advisable to broaden the aim of the lesson sufficiently to make some use and explanation of the facts under consideration. In the lesson suggested it would probably be well to try to infer how the barrier of the mountain system would affect the spread of settlements westward. The explanation of the presence of these mountains would probably be much beyond the ability of the pupils to think out, and should be left in their minds as one of the open problems to be taken up for solution later.

II

Bryant's "To a Waterfowl" is an excellent illustration of the use of description, narration, and analogy. For its study the following suggestions are offered.

The poet was walking out in the country and trying to make a decision in regard to the problem of how he should spend his life. It will be of interest to see how the inspiration for the poem came and how it helped him in solving his problem.

Find Plainfield, Mass., and read in your geographies the description of that part of the country. Try to think how its hills, fields, woods, lakes, and valleys appear. Try to place yourself in his place; imagine the beautiful pictures he describes as you slowly read the poem. Commit the poem. Which are the most beautiful stanzas? If you wish, place in the picture the hills, fields, woods, lakes, and valleys that you know best. Examine the comparison made between the wild bird and his life. See what conclusion he reaches and note which stanza tells why.

The beauty and interest of the poem may be more or less largely lost by lack of tact in questioning. There should be discussion and comment to make clear the pictures presented, but such poems are somewhat like a beautiful rose. The rose is a beautiful thing to be studied, enjoyed, and appreciated, but if it is pulled to pieces in the process it has no further value as a rose.

III

Opportunity for the generalization of laws on the basis of a suitable number of cases occurs in all school subjects. In algebra it is the law of which so much use is made. The explanation of the law early drops into the background. Illustrations of this are the laws of factoring and the laws of multiplication. Their close relation and the light which each of these throws on the other indicate that they should be

presented in close relation. The same is true of much of the work in arithmetic. Many of the rules are generalizations of customs that slowly grew up and whose explanation is quite remote from the use of the rules. The same may be said of much of the work in spelling and language. Part of the problem indeed is to discover what the current custom is.

The following illustrates plans for the discovery of a principle:

Our examination of the climate of the Bermudas shows that the temperature of the islands varies relatively little throughout the year. We try to discover the causes of this uniformity, *i. e.*, to find the force or forces at work that make the temperature so nearly the same.

It will be well to examine the geography of the islands first. This will include the following, together with any other facts that you may think worth considering;—their latitude, longitude, variations in the temperature of the surrounding water, the surface, soil, exposure, vegetation, prevailing winds, and the distribution of the rainfall.

Having done this, examine other places where the temperature also varies little, *e. g.*, Wake island, Guam, the Bahamas, Samoa, St. Helena, the Fijiis, etc. Compare these places with the Bermudas in regard to each of the points mentioned, and note what things are in common to them all. Think what this suggests as the possible cause and why.

Next select places where the temperature varies widely during the year, *e. g.*, Mankato, Omaha, St. Louis, Denver, etc. See if the facts common before are present in these localities. Think how this affects your first conclusion and why.

Try next to show how the things in common could produce the result,—the relatively uniform temperature,—and think how this affects your first conclusion. State your conclusion.

Test it by asking what you would expect to be true of the temperature of Honolulu and why. See in the reference books just how the temperature of Honolulu does vary.

The inductive method of variation has a large place in all research work in the fields of science. It is not by any means limited to those fields. History offers many opportunities for its use. Among the many interesting topics in which this method may be used is "The causes of the variation and distribution of immigration." Among those in geography is "The causes of the tides." This latter gives the chance for many to make first hand observations when living at the seaside, and when not, of considering those made there and recorded.

The observer notes that the tide rises and falls everyday, but a certain number of minutes later each day. He also notes that the moon rises the same number of minutes later each

day. It is further noticeable that during each period of four weeks the height of the tides varies. When these are at their greatest height, sun, earth, and moon are in a straight line, but when the three form a right angle the tides are lowest. The variation being a constant one the question of the relation between the tides and sun and moon seems very certain but there remains the question, "How do they cause the tides?" It is at this point that the texts take up the problems without first having considered observation as having much to do with the case.

IV

Deduction has a very large place in all fields of work. Geography is one of the very interesting sources of illustration of deduction. In geography as elsewhere, laws, principles, and analogy are used for explanation, inference, and guidance. The following will serve as an illustration.

Problem:—How should we expect the temperature of the British Isles to vary throughout the year? Why?

In order to think this out, first review the list of principles controlling climate as stated above. Then note the range of the islands in latitude, the directions and exposure of the slopes, the direction and position of the high lands, the kinds of soil, the variations in temperature of the surrounding bodies of water, and the prevailing winds. Ask yourself in what ways you would expect each of these to affect the temperature of the country and why?

After the inferences have been stated the teacher should turn to an accurate statement of the variations in the temperature and compare the results of the children with those of the books. Progress in making accurate inferences will be assisted by noting the mistakes made and trying to see how they were made.

The same problem may be treated from the point of view of explanation, but in this the variations must be known and then the reason for each sought. A knowledge of the principles is equally necessary in this, because principles are as already defined. The following quoted from Reclus's Europe, pp. 18, 19 and 20, in regard to Great Britain, is an illustration of a statement of facts for explanation.

"Only in the inland counties (in summer) and on part of the east coast do we meet with features reminding us of a continental climate. The temperature during that season decreases with a considerable degree of uniformity, from 63 degrees Fahrenheit in the Thames valley, to 54 degrees in the Orkneys. In the winter the mean temperature of the Orkney

Islands is hardly inferior to that of London, situated 500 miles farther south.

"In the eastern part of Great Britain, and more especially in that part of it which lies between the Naze and the Firth of Forth, the winter is coldest. January is a far colder month on the banks of the Thames than in the Hebrides, and the plants which the frosts of Middlesex would kill flourish in these islands in the open air, even in midwinter. Yet it happens but rarely that the largest rivers become icebound. The winter temperature is mildest on the southern coasts of Devonshire and Cornwall, and there the myrtle and other subtropical plants flourish in the open air all of the year round.

"Snow and ice are, of course, known, and the quantity of the former which occasionally falls in northern England and in the Scotch highlands is great. It is rare, however, for the temperature to fall below 18 degrees Fahrenheit, and rarer still for such a degree of cold to continue for any length of time. The difference between the mean temperature of the coldest and the warmest months hardly ever exceeds 25 degrees Fahrenheit, and in southwestern England it does not amount to 19 degrees. The daily range of temperature in Shetland, the Orkneys, and the Hebrides, is only about 10 degrees. On the west coast of Great Britain it rises to 12 degrees and 14 degrees, and in the central districts to 15 degrees, and in the south to 20 degrees."

V

The composite thinking finds illustration in the following:

A student desiring a study table for her own room at home had the opportunity to make one in the manual training department. There were many facts for her to consider and these came in the form of questions.

How much space could be taken by the table when completed? Of what material must it be made? Why? What would she be likely to use the table for? What drawers or shelving should be made a part of it? What suggestions could she get from magazines, books, furniture stores, or elsewhere in regard to the arrangement and size of these? What had occurred to her as suitable in regard to these? After discussion and criticism of the ideas gathered, she was directed to assemble and organize such as were worth while and express them in a plan drawn to scale. She was also told to make out an order for the material. These were then considered for possible modification. The work of construction was then begun and carried out to a successful issue.

THE DISINFECTION OF BOOKS

By Leonard Blaine Nice, Clark University

Books seem well adapted for carrying small-pox, measles, scarlet fever, trachoma, diphtheria, erysipelas, dysentery, typhoid and tuberculosis. Yet so far as I have been able to find no satisfactory method for the disinfection of books is being used anywhere in this country. Books are a particular diversion of invalids and convalescents, therefore they are in much danger of becoming infected. If a person sneezes or coughs, he is very apt to hold his book in front of him. By placing petri dishes around tubercular patients, Flügge (14) found that tubercle bacilli are thrown as far as a yard in the coughing, sneezing or even speaking of such persons. Besides the danger of contamination in these ways and in the ordinary handling of a book, many people persist in the uncleanly habit of moistening their fingers in their mouths when turning the leaves.

Scarlet fever has been carried to distant places by letters (11). A case is known where a mother and baby were fatally infected with septicemia from a book (11). In Bordeaux several people were attacked by a feverish lumbago after having rearranged the library books of the Faculty of Medicine (6). Letters written by small-pox patients infected the post-office officials in Kent, England (29). Most serious of all, an epidemic of tuberculosis occurred among the officials in the archives of Kharkow, Russia (11). The excise officer had been in the last stages of tuberculosis and had been in the habit of moistening his fingers with saliva as he handled the documents.

The length of time that the different pathogenic bacteria can withstand drying varies greatly. Krausz (15) placed bacteria from 48-hour-old cultures in books and kept them in the dark at room temperature. He found that cholera lived only 48 hours, whereas diphtheria lived 28 days, Staphylococcus 31, typhoid 40-95 days and tubercle bacilli 80-103 days. Other investigations confirm his results except in the case of

Note.—I wish to thank Dr. Wm. H. Burnham for suggesting this problem, my wife, Margaret Morse Nice for aid and criticism, and the Library of Clark University for securing the literature.

tuberculosis and diphtheria. Abel (29) found that diphtheria bacilli retained their virulency on toys for six months and this is the length of time that Von Schab (27) gives. Lion (17) and Von Schab both say that tubercle bacilli withstand drying for six to nine months.

The number of bacteria that may be found on much used books was investigated by Lion (17). A novel from a public library varied from 250 bacteria per 100 square centimeters on the middle of a clean page to 1,250, 1,875 and 3,350 on the dirty edges. A college atlas showed from 650 to 1,075 per 100 square centimeters; an anatomy book 2,275 to 3,700. The bindings were by far the richest in bacteria yielding on an average 7,550 per 100 square centimeters.

As to the pathogenic bacteria that may occur on books, the following investigations are of great interest. Krausz (15) inoculated seven guinea pigs with dirty pieces of paper from much used books and they all died of peritonitis. The eighteen inoculated with pieces from clean books remained healthy. Du Cazal and Catrin (6) found Staphylococcus pyogenes on an old book in a hospital. Most striking of all are Mitelescu's (20) experiments. He took 60 much used books that had been in a public library from six months to two years; he cut out the dirtiest parts, soaked them in salt solution, centrifuged the liquid and inoculated guinea pigs with the sediment. Nineteen died of septicemia and twelve of streptococcus infection. He repeated the experiment with thirty-seven books from three to six years old. Fourteen of the guinea pigs died of septicemia and fifteen contracted tuberculosis. The damp dirt on the older books was a good medium for tubercle bacilli.

A book is a very difficult thing to disinfect. The method used must kill all the bacteria, must not injure the books and finally must be as easy to use and cheap as possible. The disinfectants that have been tried for books are steam, Pictet's gas mixture, formalin, carbo-gasoline, steaming formalin vapor under vacuum, dry hot air and moist hot air.

Steam fulfills the first requirement by killing all the bacteria, but unfortunately it is very injurious to books, especially to leather. It is recommended, however, by Abba (1), Du Cazal and Catrin (6), Krausz (15), Petruschky (22) and Rickards (23) who suggest that all school and library books should be stitched instead of glued and have as cheap covers as possible so that steam disinfection would not injure them very seriously.

Letters on the other hand do not suffer any bad effects from being autoclaved. This was the experience in the aforementioned smallpox epidemic in Kent; the letters were autoclaved, no more smallpox was disseminated and the letters

themselves were uninjured. This was confirmed by experiments of my own.

Pictet's gas mixture—sulphuric acid and carbonic acid in equal parts—was tested as a book disinfectant by Von Schab (27), but he found it ineffective.

On account of the convenience of formalin as a disinfectant it has been adopted in many cases for books without due regard to its effectiveness for this purpose; Lehman (16), Englund (7), Lion (17) and Miquel (19) had apparently satisfactory results with formalin. However more exhaustive investigations by Du Cazal and Catrin (6), Van Ermengen and Sugg (26), Knopf (14), Von Schab (27), Barbe (3), Ballner (2) and Rickards (23) have proved conclusively that formalin will not kill bacteria in books. A gas will not penetrate between the leaves of a book no matter how ingeniously the book is held open.

In this country a device for general fumigation is the DePree formaldehyde fumigator. Mr. DePree told the writer that he recommends no penetrative qualities for formaldehyde gas and that it is therefore not adapted for book disinfection.

A new method has recently been suggested by Beebe (3) for disinfecting books by immersing them for 20 minutes in a 2% solution of carbolic acid in 88 Baüme gasolene. He smeared a small amount of a bouillon culture on the leaves, 50 pages apart, of previously autoclaved books. One book was infected and immediately immersed for 20 minutes in carbo-gasoline; then the infected areas were placed in bouillon. Two other books were allowed to dry for an hour after being infected; they were then immersed for 20 minutes, and cultures made immediately from one of them, whereas the other was allowed to dry over night before they were made. 18 inoculations were made of B. diphtheriae, 7 of Staphylococcus pyogenes aureus, 18 of B. coli communis and 19 of B. typhosus—a total of 62—without growth in any case. He also placed tuberculous sputum between the pages of books and immersed then in carbo-gasoline for 20 minutes. Three guinea pigs were inoculated with this sputum, and one contracted tuberculosis.

I tested this method using 88 Baüme gasoline saturated with carbolic acid (about a 2% solution). Books thoroughly dry after having been autoclaved were inoculated 20 pages apart with a loopfull of agar or bouillon cultures. The inoculated books were then placed in a sterile chamber for 48 hours so that the cultures would thoroughly dry to prevent any danger of their being washed off. Instead of 20 minutes they were left in the carbo-gasoline for one hour. They were then removed and allowed to dry for 96 hours to make sure that the gasoline would all evaporate. Cultures were then

drawn off. 80 inoculations were made, 28 of Bact. diphtheriae, 27 of Staphylococcus pyogenes aureus, and 25 coli communis. 55 of these grew: 25 of the diphtheria, 17 of the Staphylococcus and 15 B. coli.

The next step was to determine whether saturated carbogasoline solution will kill bacteria when placed directly in contact with them. Nine test tubes containing slant agar cultures of B. diphtheriae, Staphylococcus pyogenes aureus, and B. coli communis—3 of each—were filled with carbogasoline. This was removed after one hour and ten minutes. After 96 hours cultures were drawn off. Growth occurred in two of the Staphylococci cultures, one of the diphtheria and two of the B. coli.

By repeated tests it was found impossible to make a stronger solution of carbolic acid in gasoline than about 2%. So there seems to be no hope of modifying Beebe's method so as to make it effective. The only way that I can explain the lack of growth in Beebe's experiments is that his bouillon cultures must have been washed off by the gasoline since he did not thoroughly dry them. This is confirmed by my own experiments; for although they were well dried, only 25% of the bouillon cultures grew while 80% of the agar grew.

The three factors of formalin, vacuum and heat are combined by Kister and Trautman (12 & 13) in their method of disinfecting books. The books have to be held open; the temperature is 70° C. for two hours with a vacuum of 450 millimeters. This was further tested by Xylander (28) and also by Sobernheim and Seligman (25) and was found to disinfect books satisfactorily without injuring them. The apparatus consists of a formalin vaporizer, a disinfection chamber, a vacuum cylinder and an air pump. Although this method is effective, it is not very practicable; for only a few books can be disinfected at a time and the apparatus is complicated, expensive and difficult to manage.

Dry hot air at 140° C., when employed for a long time, will kill non-sporing bacteria, but such a high temperature is injurious to books. Mosebach (21) had good success in a few tests with dry air of 70°-80° for 14 to 24 hours, but Xylander (28) found that the least time necessary was 32 hours and that moisture supplied either by water or formalin shortened the disinfection time to 25 hours.

Moist hot air fulfills all the requirements for an ideal book disinfectant; for it kills all the bacteria, it does not injure the books and it is inexpensive and convenient to use. Several investigators worked along this line: Schumberg (24), who found that hot air of 100° C. and 55-65% moisture will kill bacteria without injury to leather; Ballner (2) who, adopted

this method for single closed books using a temperature of 95° C. and 40-60% moisture; and Berlioz (5) who, with a temperature of 95° C. supplied his moisture by a dish of formalin and ethyl aldehyde. The perfecting of the moist hot air disinfection of books is due to Xylander (28) and Findel (9 & 10). Xylander's work was especially thorough and convincing, for he made considerably more than a thousand tests. 78° to 80° C. and 30 to 40% moisture for 32 hours will kill all non-sporing bacteria in closed books, even tubercle bacilli in thick layers, and does not injure the most delicate binding in any way, even after months of disinfection. Greater heat than 80° C. and more moisture than 40% is injurious to the books. When disinfecting a pile of books a small thermometer should be placed in a rather thick book in the middle of the pile. When this thermometer registers 70° C., which may take 11 hours, the disinfection may be counted as begun. It must continue for 32 hours in order to kill all the bacteria. I tested this method making 73 inoculations and obtained perfect success.

The apparatus needed is simple. It consists of a double walled case of galvanized iron. The space between the walls is filled with water. Heat is supplied from beneath. The shelves for the books are perforated or of wire. The moisture is supplied by water dripping from the roof onto a flat dish of porous material which is soaked full and then gives up the water in the form of vapor. The thermometer and hair-hygrometer are fastened to the inside of the door, which is fitted with a glass pane so that they can be read.

In order to find out the condition of affairs in this country letters were written to the Boards of Health of all the States and of all cities with a population over 100,000. They were asked what disinfectants and what methods they use in disinfecting contaminated school and library books. Only six answers mentioned library books; three of these said infected library books are destroyed; two, that they are fumigated with formalin, and one Board makes "daily reports to both school and libraries of all contagious disease matters," but it failed to state what action is then taken. As to school books 12 States and 10 cities do nothing at all; 9 States and 22 cities burn all contaminated books; 17 States and 25 cities use formalin; 2 States and one city use dry heat; 3 cities use steam and one State and 3 cities are trying carbo-gasoline. Of those using dry heat, one says merely "we use dry heat sterilizing;" a second uses 140° C. for one hour, which according to all authorities is too short a time to kill the bacteria and besides injures the books. The third uses 80° C. for 2 hours. I tested this and the cultures grew in every case.

Only nine States and 25 cities—those who burn and those who use steam—are taking proper precautions in regard to the danger of infection from scarlet fever, diphtheria, small-pox and occasionally measles. This is being done, however, at the sacrifice of the books. A significant fact is that not one of the 100 letters mentioned tuberculosis.

Conclusions

1. Books are known to have infected people with septicemia, feverish lumbago and tuberculosis. Letters have carried scarlet fever and smallpox.

2. Staphylococcus is able to withstand drying 31 days, typhoid bacilli 40 to 95 days, diphtheria one to 6 months, and tubercle bacilli 3 to 9 months.

3. Well used books have been found to have from 3,350 to 7,550 bacteria per 100 square centimeters.

4. Seven guinea pigs died of peritonitis when inoculated with pieces of dirty books. Guinea pigs were inoculated from 60 well used books that had been in a public library 6 months to 2 years. 31 died from septicemia and streptococcus infection. Other guinea pigs were inoculated from 37 books from 3 to 6 years old; 14 died from septicemia and 15 contracted tuberculosis.

5. Steam is an effective disinfectant but ruins the books.

6. Formalin is entirely untrustworthy as a disinfectant for books.

7. Dry hot air is not a satisfactory method.

8. Carbo-gasoline is absolutely inefficient as a book disinfectant.

9. Moist hot air at 80° C. and 30-40% humidity for 32 hours will kill all non-sporing bacteria in closed books, even tubercle bacilli in thick layers, and does not injure the most delicate binding in any way.

10. Boards of Health should make daily reports to the schools and libraries of all contagious diseases, including smallpox, measles, whooping cough, scarlet fever, typhoid, erysipelas, dysentery, diphtheria, venereal diseases and tuberculosis. Books that have been in the hands of such patients should be disinfected by the moist hot air method.

11. As a matter of precaution, especially against tuberculosis, it would be well if public library books that are much in use and all school books were disinfected by this method at regular intervals. Public school books should always be disinfected before given out to a new set of pupils.

12. When using a public library book one should realize that it may have been in the hands of some one suffering from tuberculosis or other disease. A wise precaution is to

carefully wash the hands after using such a book. One should *never* moisten his fingers with saliva when turning leaves.

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THE COMMON DRINKING CUP

By W. A. Matheny, Clark University

The history of the movement against the use of the common drinking cup dates back three and one-half centuries. According to some old letters recently found by Martin (9) in the library of the city of Zürich, Zanchiny, a former student of Calvin and at one time Professor of Theology at Strasbourg, insisted on individual communion cups, and especially was this enforced during the Plague of 1564. Among other manuscripts he found interesting documents showing that in 1783, Christian Gottfried and a little later, Johann Daniel Metzger, raised serious objections to the common cup giving as a reason his belief that syphilis may be transmitted by it.

Scientific investigation of the problem did not begin until about ten years ago. Metzger and Mueller (10) made diligent inquiry among one hundred and twelve physicians. Their results showed that the promiscuous use of the public cup offers beyond a question of doubt positive and serious dangers. By inoculating guinea pigs in the usual manner Roepke and Huss (19) were the first to prove definitely that tuberculosis can be transmitted from one mouth to another by means of the drinking glass.

One of the best experimental studies on the survival of infectious germs on glasses and forks was made by von Esmarch (6). Drinking glasses and forks were smeared with saliva mixed with cultures of tubercle bacilli and other microbes. He found that bacteria in a living condition adhere persistently to the dishes even after a careful washing. The edges of drinking glasses and the tines of forks were washed in cold water and wiped with a sterile cloth. They always showed infecting power after this process. Washing in lukewarm water gave no better results. Efficient disinfection can be obtained by allowing the utensils to remain five minutes in water at 50° C. Evidence of the tubercle bacilli even appeared after this method was employed. Washing in boiling water for one minute gave satisfactory results as did also washing in water at 50° to which had been added two per cent. carbonate of soda. Esmarch concluded that the ordinary washing of dishes has little value in getting rid of living organisms.

Cristiani and de Michelis (3) experimented along the same lines using different methods. In place of rubbing the objects with the saliva mixed with the cultures of bacteria as was done by Esmarch, they approached more nearly the natural conditions. A small portion of a culture of Bacillus prodigiosus was placed in sterile water and shaken until the bacteria were evenly distributed through it. A drop was then placed on the tongue and allowed to diffuse through the mouth cavity. Many perfectly sterile glasses were then immediately placed to the lips as in the process of drinking. The edges of these glasses were afterwards touched to the surface of plates of nutrient media. In every plate abundant growths of B. prodigiosus resulted showing beyond a doubt that the saliva is able by the simple contact which exists in the act of drinking to contaminate the edge of the glass sufficiently so that the germs of one mouth may be carried to another mouth.

Their work on the sterilization of glasses gave somewhat different results from those obtained by Esmarch. They contaminated the glasses with B. prodigiosus by the same method that he used. In their process of cleaning they proceeded as follows:

1. A series of three glasses were all simply wiped with a sterile cloth without washing.

2. Another series was rinsed in a basin of cold water and afterwards wiped as one wipes generally in the kitchen, that is, with little energy.

3. A third series was washed as the preceding and rinsed afterwards in pure water then wiped as one wipes in the laboratory, that is, carefully.

The results obtained showed method 1 to be positive; method 2 also positive but the colonies were less abundant. Method 3 showed some positive and some negative.

These experiments were repeated with Staphylococci, Streptococci and the Bacillus of Loeffler. The glasses were contaminated according to Esmarch's method. The results were practically the same as those stated above for B. prodigiosus. The writers conclude that careful washing is extremely beneficial.

Saroglau (22) experimented with spoons and drinking vessels using Bacillus prodigiosus, B. subtilis and Staphylococci. Smears of these three forms were placed on the glasses and spoons in three different solutions,—pure water, albuminous water and saliva. The test for the presence of bacteria remaining on these utensils was made by touching them to the surface of the nutrient media. B. subtilis was found on the glasses twenty-three days after it was smeared there in the ordinary water solution, and twenty-six days after on the

saliva glasses. The saliva-Staphylococci glasses gave positive results when tested at the end of four days. B. prodigiosus on the saliva glasses was also positive at the end of four days.

The same writer made some extensive studies with the common cup used in communion service. He found it to carry bacteria in a living condition, the wine used having absolutely no effect on the organisms.

He further reports cases of syphilitic infection occurring in certain student societies where the common drinking cup was used. He is strongly of the opinion that infection of this kind can occur through the use of the public cup.

By means of guinea pig inoculations Price (18) has proved that table utensils used at Sanatoria are good carriers of tuberculosis. The washings from forks, cups, spoons, etc., used at one meal by consumptives were injected into eight guinea pigs. Forty-one days later six, or seventy-five per cent., of the pigs, were found to have tuberculosis.

In another experiment on similar utensils he found that no tubercle bacilli survived when the articles were thoroughly washed with soap and water as hot as the hands could stand and then rinsed in boiling water.

In this country objection was first raised to the common cup by VanDerwerken (23) in 1892. In 1898 Anders (1) found tubercle bacilli and Staphylococci in the dregs of a communion cup used in a Philadelphia church. Five years later Kinyoun (7) isolated pneumococci and the Klebs-Loeffler bacilli from a public drinking cup taken from a railway coach.

The results obtained by Davidson (4) in 1908 gave the movement a great impetus. He made extended studies of various public drinking vessels. On cups taken from a school room he found both tubercle bacilli and pneumococci. That there could be no doubt of the identity of these organisms he isolated them, grew them in pure culture and inoculated guinea pigs. His evidence is convincing in every particular. In other experiments he isolated from school cups Streptococci apparently the same as those occurring in sore throats and tonsilitis. The pus germ Staphylococcus aureus was present also.

In another study Davison (5) reports securing a cup from a well on a college campus where it had been used for weeks by workmen and by students. By inoculating a guinea pig with the washings of this cup he proved that it bore living and virulent tubercle bacilli. A cup taken from a railway station when examined in a like manner showed tubercle bacilli. He summarizes his experiments by saying that "Thirty-seven and one-half per cent. of the public drinking cups examined for the presence of pathogenic germs, bore tubercle bacilli." He

further states that "These revelations, the reader will note' harmonize with the well-known fact that half of the individuals of the human race in civilized countries are infected with the tubercle bacillus before the twentieth year."

In this connection the germ content of the mouth becomes of considerable interest and importance. That many people apparently in good health may carry pathogenic organisms in their mouths has been demonstrated by a large number of investigators. This condition is especially true among convalescents. We have already cited indisputable evidence that a part of the germ content of the mouth is deposited on anything touched by the lips, especially is this true with glasses, cups, forks, spoons, etc. Davison (5) says: "An examination of a hundred glass slips touched by the lips of different persons showed the number of germs deposited on each to vary from a few hundred to more than a hundred thousand. Three clean, sterile glasses filled with sterile water and each used once by a child presented rich infection under the microscope. All bore bits of dead skin Number 1 had on its brim approximately 13,000 bacteria; number 2, 20,000; and number 3, had 28,000."

An experiment similar in nature was performed in our laboratory. A hundred glass slips were touched by the lips of different people and then subjected to microscopic examination. The results in no way differ from those obtained by Davison.

Of intense interest is a recent experiment performed by the Department of Health of the City of New York. The information was sent the writer by letter from the Sanitary Superintendent, Dr. Walter Bensel. There seems to be no published account of this work so the entire letter is quoted.

NEW YORK, Sept. 12, 1910.

W. A. MATHENY,
Clark College, Worcester, Mass.

Dear Sir: In response to your letter of September 5, requesting information concerning the tests made by the Department of Health with common drinking cups, I beg to submit the following:

In making the tests twenty-two patients of the Willard Parker Hospital of this department were used. Nine of the patients had diphtheritic membranes and diphtheria bacilli were present in the throat of every patient. Each patient drank water from a sterile glass, the place where the patient's lips touched the glass was marked for identification. The glasses were allowed to dry after which a culture was taken from the portion of the glass touched by the lips of the patient. The results are shown below:

In addition to showing the presence of diphtheria bacilli, all of the cultures with the exception of two showed the presence of streptococci.

Respectfully, WALTER BENSEL, M. D.
Sanitary Superintendent.

Number of Patients	Period elapsing between the time the glass was touched by the patient and the time the culture was taken.	Results of cultures from glasses (diphtheria bacilli present.)	Per cent.
8	10 minutes	3	37.5
5	1 hour	2	40.
4	4 hours	1	25.
5	18 hours	2	40.

Slack, Arms, Wade and Blanchard (21) in their examination of 8,531 Boston school children conclude that,

"At least 1 per cent. of all healthy school children are carriers of morphologically typical diphtheria bacilli (Wesbrook's A, C and D types)."

Pennington (17), of the Philadelphia Health Bureau, has made investigations among well school children. In twenty-five schools taken at random she found 9.3 per cent. of the children infected with diphtheria-like organisms. About one-eighth of these organisms were highly virulent to guinea pigs.

Von Sholly (20) examined the throats of one thousand tenement-house children who came to the hospitals and dispensaries of New York City. Children suffering from anything suggesting a "sore throat," nasal discharge, or laryngitis, were not included in the experiment. Of this number eighteen or 1.8 per cent. showed virulent Klebs-Löffler bacilli.

From the experiments cited and from the works of Neumann (14), Park and Beebe (15), Kober (8), Müller (13), and many other investigators we may conclude that at least a half-million people in the United States carry in their mouths or throats typical diphtheria bacilli. More than a fifth of these are virulent and ready to do deadly work on reaching a susceptible person.

Park and Williams (16) have isolated typical pneumococci from about one-half of all mouths of well persons examined.

Miller (11, 12) was able to discover typhoid bacilli in the sputum of the mouths of apparently healthy persons. Bulkley (2) in his book, "Syphilis in the Innocent," details many cases, and even epidemics, of syphilis transmitted by means of spoons, knives, forks, glasses, jugs, tobacco, pipes, etc. It is now known to science that the specific organisms of all the common diseases of this country except five are found in the mouths of different persons.

The evidence cited certainly more than justifies the action that had been taken against the use of the public drinking cup. It is now, Feb. 1911, abolished by law in seven states. Kansas, in March, 1909, was the first state to take this action. Similar action has since been taken in Oklahoma, Michigan, Wisconsin, Massachusetts, New Hampshire and Mississippi. Thirty additional State Boards of Health have condemned the public cup and expect to abolish it in the near future. In six states such legislation is now pending.

At a recent meeting of the national Federation of Women's Clubs held at Cincinnati a movement was started among its million members to abolish the common cup in every state in the Union.

More than forty railroads throughout the country have substituted the individual paper cups for the old time rusty cup familiar to every one. The movement is rapidly gathering momentum and threatens to abolish in every state "this symbol of equality and good fellowship," as it was explained to the writer by a physician "not yet convinced." In theatres, department stores and public buildings of all kinds the old cup that has served for ages is seen no more.

The public schools throughout the country are rapidly awakening to the problem. In a very large per cent. of our cities some form of bubbling fountain or the individual cup is now used. It is evident that the former is more hygienic and should be used wherever it is possible to have it.

Of all the fountains now in use the style which is run by foot-power seems to give the best results. A slight pressure with the foot on a pedal at the base of the fountain starts the water flowing in a uniform stream. When the stream is not flowing a dust-proof cap protects from contamination the orifice through which water is delivered to the consumer. It is economical in the amount of water used, the flow being discontinued at the will of the drinker. The continous flow bubble fountain is not desirable on acount of its great waste of water. One model of the former fountain can be set up in any sink, and is adjustable to any height. Another model is made in different heights thus rendering it suitable for any grade of pupils. An important consideration in favor of this fountain is the fact that there is no way of tampering with the apparatus to regulate the size of the flowing stream. This removes a factor which has caused other fountains to be used as "playthings" by the pupils. Considered from every point of view this style of fountain is, in the opinion of the writer, the most satisfactory one now on the market.

There are a great many different varieties of individual cups now in use. In practice the glasses give better results than

the paraffin cups. The latter are soon soiled and as they are unwashable their sanitary nature is soon lost.

If individual cups must be used then there should be more attention paid by those in charge to the conditions under which the cups are kept when not in use. It is common practice for the pupils to keep their cups in their desks, a method which is both inconvenient and unhygienic. A better plan is the one now used in several states. The cups are numbered and hung on numbered pegs in a dust-proof case which is usually kept in one corner of the schoolroom. This allows of a better inspection of their cleanliness on the part of the teacher and makes it convenient for all concerned. The school should own these cups and should assume the responsibility of keeping them sanitary.

In making inquiry among the teachers of this city where the individual cup is in use, we have found that some of the teachers insist that the cups be washed regularly, while others give the matter little or no attention. Each child is supposed to supply its own cup and keep it in its desk when not in use. The great majority of pupils do this; although there are some who do not. The latter class borrow from the former class or do without drinking. Practice shows that it is not possible to control the borrowing and lending of cups among the pupils.

That the borrowed individual cup may offer serious dangers to the user is well established. Six individual glasses were obtained from some of the schools of this city and examined by the usual laboratory method. Two were pronouncedly filthy while the remaining four were found to be far from sterile. On staining these glasses they were found to bear Staphylococci Streptococci, and Bacilli in great numbers.

Another disadvantage of the individual cup is found in the attitude assumed towards it by the larger pupils,—namely that it is childish for them to carry a drinking glass about with them. The principals and teachers of this city are united in the opinion that the bubbling fountain is from every point of view more desirable than the individual cups.

Summary and Conclusions

I. Science offers clear and positive evidence that living virulent pathogenic organisms are transmitted from mouth to mouth by means of the common drinking cup.

II. Sentiment against the use of the public cup is spreading rapidly. Laws abolishing it have been passed in at least seven states.

III. The bubbling fountain and the individual cups are being used in place of the common cup. In schools the former

gives better results and should be maintained where it is possible to have it.

IV. This movement is neither a "frill" nor a "fad" in education. It is a fight for the protection of public health and is of public interest. There was a time when an epidemic of diphtheria was looked upon as "the wrath of Providence." To-day we charge it to ignorance and hasten to find the source. When the public cup is abolished far and near a deadly blow will be given to this and many other spreaders of disease which are now rooted in the ignorance of the people. The common drinking cup has had its day.

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THE PROBLEM OF JEWISH EDUCATION

By A. Millner

It gives me great pleasure to have the privilege to speak to you this evening as the Principal of the School now being dedicated by you. The problem of Hebrew education, is intrinsically connected with the higher problem of Israel's existence among the nations. The inter-relation and interdependence between the two problems is so great that to deal with one makes it hard not to deal with the other also. I may, therefore, be allowed to sketch first with a few words, the problem of Israel's existence and subsequently touch upon the problem of Jewish education.

A Greek legend tells us that there was an island in the Mediterranean which was inhabited by nymphs or sirens, endowed with voices so sweet and enchanting that all the mariners passing that island and coming under the spell of their bewitching tunes were charmed out of their senses and so they let their vessels founder on the nearby rocks or hurled themselves into the briny deep of the Midland Sea. When, however, Ulysses, the greatest adventurer of Greek mythology, in his wanderings through the Mediterranean came across that fatal island, he stopped up the ears of his companions with wax and tied himself fast to the mast of his vessel so as to escape destruction from the luring singers.

A different method to withstand the charms exercised by the sirens on their hearers was, the myth tells us, employed by Orpheus. When he, in company of the Argonauts passed that ill-famed island the nymphs, as usual, began to sing. But Orpheus, himself an unsurpassed singer, produced such a melodious song as to quell, or break the spell caused by the seductive airs of the sirens.

This Greek myth, my friends, illustrates to perfection, all the possible solutions of the problem of Israel's existence in the Diaspora, or Goluth. After the destruction of the Jewish state, when Israel was scattered over all the lands known in antiquity, the greatest problem that ever confronted a people came up for us Jews:—How shall Israel, disunited and scattered, preserve its identity? How shall it live on under conditions which have always brought about the complete extinction of any other tribe or race? Or let us formulate the problem

thus: How shall Israel listen for centuries to the siren voice of the nations: "Come ye and amalgamate with us, and yet resist their luring call with the greatest of tenacity." One simple solution of the problem is that reached by our morally weak Jews of all generations. It is they who, not having the moral power to resist, yield, not unlike the seafarers of the Greek legend, to the siren voice, and merge their tribal identity into the ocean of humanity, thus cutting themselves adrift from Israel forever.

Happily, such weak Jews have always formed among us a negligible quantity. Another simple and yet most efficacious solution of the problem was that reached by our ancestors of old, whose watchword became, "Make a Hedge around the Law." Form a wall around the life of the Jew so as to make him impervious to influences from without." Their method was exactly the method employed by the mythical Ulysses. They stopped their ears to the siren voice of the nations, and so the Ghetto came into existence, first the spiritual Ghetto was initiated, and soon after followed the Ghetto real and proper. Tortoise-like the Jew built a scaly case around his being and tortoise-like he braved with his shielding shell centuries and ages. Were this the only merit of the Ghetto its existence would have been by it alone, fully and amply justified. This Ulysses way of guarding oneself against destruction-spelling influences was, if not the direct result of, yet quite congruous with, the general spirit that swayed the nations of antiquity and the Middle Ages down to our modern time.

But a change came over the spirit of the nations of Western Europe, which initiated a new era for mankind, and every country that became imbued with the spirit of that era has seen the medieval Ghettos crumble and fall. The old fence guarding Judaism against disintegration fell down in many countries, and Jewish sons and daughters are themselves great votaries of the new spirit.

Unhappily—or one may perhaps paradoxically say happily—the bulk of the Russian and other Eastern European countries is still clinging to the old way of preserving Judaism. They are kept *nolens volens* in the Ghetto. But how long, and the old Ghetto life will be no more!" There are many portents and signs that the time honored way of preserving Judaism is no more holding its own, even in darkest Russia.

And what about conditions among the two million Jews in this land of God? It is well known to you what a serious aspect the problem of perpetuating Judaism in this country bears. It looks as if Isarel were soon to give up its long struggle against amalgamation, say many pessimists. Israel is too much enticed by the all powerful spirit of our modern

age to which it has free access, to withstand amalgamation for a long time.

Indeed, never in its long history has Israel been so much exposed to the luring call of the sirens. What shall modern Judaism do in order to live on? Back to the old time Ghetto? Impossible! The latter is gone in modern countries for good.

My friends, there is a third way to solve the problem of our existence. If we are not willed to merge our identity into the nations of the globe, and if time and circumstances make it impossible for us to live penned off in spiritual and real Ghettos, then let us adopt the method of Orpheus, let us make our Judaism produce such a charm as to offset the charm exercised on us so strongly by the Gentile world. And indeed our Judaism has stamina enough to withstand all the alluring powers in the world. But the kernel, the living forces of Judaism are hidden from the majority of our present generation. What they see of it is mostly incidental and unattractive. The reform wing of Judaism has essayed to meet this disadvantage. But in its zeal to emulate the nations in the charm and attractiveness of the formal side of things, it has cut away many a vital part of historical Judaism, so that if all Jews assumed the aspect of reform Judaism, their fate as a people would soon be sealed.

Such radical measures we can hardly compare to the life preserving method of Orpheus. Theirs is rather the method of Mitath N'shikah the lulling of Israel into the eternal sleep with a kiss by hobnobbing with and groveling before other cults. The real Orpheus method to be applied by modern Jews must indeed consist in making Judaism attractive in form no less than it is in content, in freeing it from many a vestige of the Ghetto, but also in preserving what is vital in historical Judaism, and withal, in making the latter a living force constantly reacting upon and influencing our lives.

One of the great reforms necessary and imperative within conservative Judaism concerns the Hebrew school. The old-time Hebrew school, commonly called Chedar, was once undoubtedly a great power and productive of much good in Israel. But it was a product of the Ghetto, and as such only in keeping with the general Ghetto life. Both the Ghetto and the Chedar looked unattractive.

With the Ghetto gone, the Chedar has become an anachronism. Modern Judaism can hardly work any good whatever with the systemless Chedar. Not alone our labor, but what is more precious, our Judaism, would be lost on it. What we need to-day is modern schools conducted along the same lines as the great public schools of the country. Some people of the Jewish population of this city seem to have fully realized

the great need of such a modern Hebrew school, in that great pecuniary sacrifices and obstacles of a much stronger nature connected with the building of such a beautiful and up-to-date school as the one now being dedicated by us, did not deter them from having it erected. They may hope that the fruit of their noble endeavor will be great and productive of much good for the entire Jewish population of this city.

But here I cannot but sound a note of warning to the future patronizers of the school. Lack of system of the old time Chedar, and its general unattractiveness have resulted in the lack of respect on the part of our own people for Hebrew schools, Hebrew tuition, and Hebrew teachers, though the latter may be modern. Let the Jewish population of this city realize that the future success of the school will largely depend on their higher mental attitude toward it. Our youth will never respect the Hebrew school and its teachers to the same extent as they respect the public school and its teachers, and consequently will profit less by its attendance unless they are impressed at home with a more adequate idea of its importance and high standing.

We must in short, to use a Talmudical phrase, implant the beauty, the order, the system of Japhet into the tents of Israel. When we look at the ways and various institutions of Christendom, what harmony, what order, what sense of propriety is suffused over all of them. It is the perception of this as contrasted with the somewhat ghettoish aspect of our orthodox schools, institutions and synagogues, that tends so much to estrange American born and bred Jewish youths and maidens from their ancestral faith. We conservative Jews must meet this our disadvantage, or we shall constantly be losing ground.

So much for the formal side of the school. I may also be allowed to say a few words concerning the curriculum to be followed in it, which to be sure, must form its primary object.

Boys and girls attending this school and desirous to pass its entire course will have to attend it for seven years. They will be put through several classes. Starting from the rudiments of the Hebrew language, they will advance to the study of the Pentateuch, the Prophets, the famous Commentator Rashi and other subjects of Hebrew literature. It will be the endeavor of the teachers to make them grasp the greatness of our primeval classics, to show them, if only in a desultory way, what store of pearls is scattered among the seemingly chaotic and conglomerate mass of Talmudic and rabbinic literature, to thrill their hearts with the woeful facts of our singular history, and withal, to inspire them with the truth that ancient Judaism was the bed rock out of which

the eternal verities and values of mankind were hewn. All this must have the ultimate end to keep them within the fold, that they may withstand the luring call of the sirens the more tenaciously the greater their allurement becomes.

And since it is not the so-called Christians who spell great danger through allurement to Judaism—except perhaps through brutal force they may employ to win us away from our ancestral faith, as in the case of Spain and Russia—but rather the good and noble and true and righteous in Christendom; the more, therefore, Christian nations at large advance, the more they soak the essence of Christianity into their lives, the harder must it then be for us to resist their allurement and their tacit reproach: "What for your particular existence, Jews? Your special mission is done. But the genius of Judaism speaks to the genius of its daughter religion:" Granted the special mission of Israel is done, but Israel is willed to live as nature is willed to continue its laws. Let them lead their particular existence. They will grow with the nations, advance with the nations, contribute their share to every spiritual domain of the nations. But as long as tribe speaks of tribe and nation speaks of nation, and as long as the ideals of Moses and the prophets are not verified among mankind to the very letter, so long will there be the people of Israel witnessing the continuously increasing light which its prophets once lit in ancient Judea.

COMPARATIVE STUDY OF CHILDREN'S IDEALS

By David Spence Hill

The ideals of children so far as they are revealed in writing the name of the person or character whom the child "would like to resemble" were the subject of the present investigation. The accompanying analyses, tables and curves comprise the various types of ideals. "Acquaintances," "Historic" or "Public Persons," "Characters from Fiction," "Religious Personages," "Ideals from Opposite Sex," are the general rubrics, with the accompanying subdivisions. (See Table I.) A total of 1,431 white children was included, pupils of two public schools of the City of Nashville, Tennessee. The schools are designated respectively as Groups T and H. The different analyses are:

1. Ideals at various ages, 7 to 15, of the 1,431 children, boys and girls of both groups combined. (Fig. I.)

2. (a) Ideals of 857 children (boys and girls combined) of Group I.

(b) Ideals of 574 children (boys and girls combined) of Group II. (Fig II.)

The analysis does not include consideration of motives. The answers to "Why," often argumentative or explicit, indicated the earnest nature of the responses in many instances.

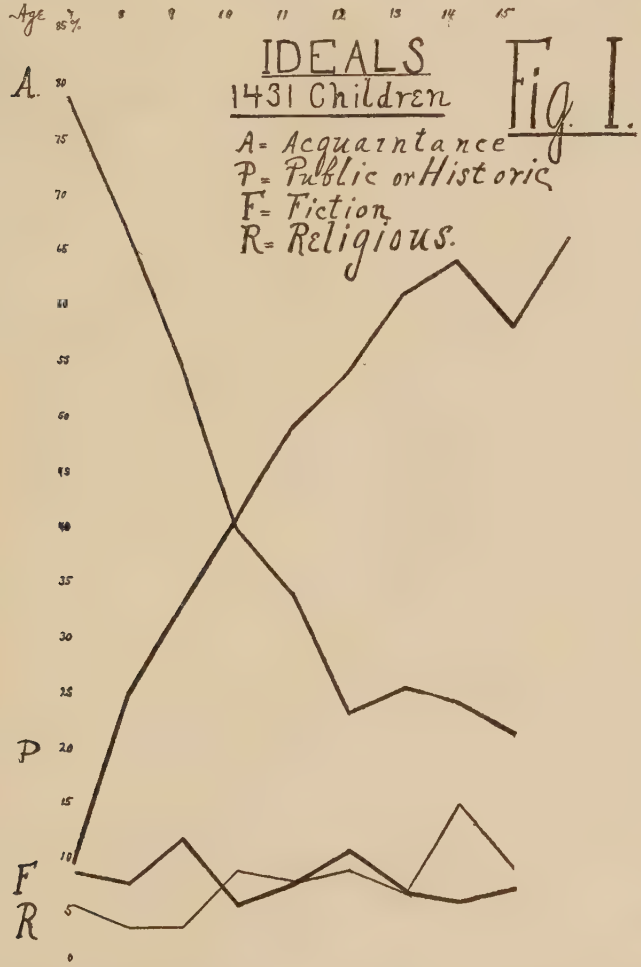
Preliminaries

Preliminary to the work described in this paper, data were got through teachers from some 400 children in three small schools. A child-study class of six members was divided into three couples, each of which analyzed the data. Enough help was given in class to insure uniformity in methods of tabulation. It was found convenient for each student to record the analysis in a composition-book, upon one page of which the rubrics for classification were written upon the left margin in vertical order. The corresponding margin of the remaining pages was cut away, so that two pages were available for each year or age recorded. This method was found much more practical than to use one large sheet of paper, and it has been followed throughout. The purpose

TABLE I.

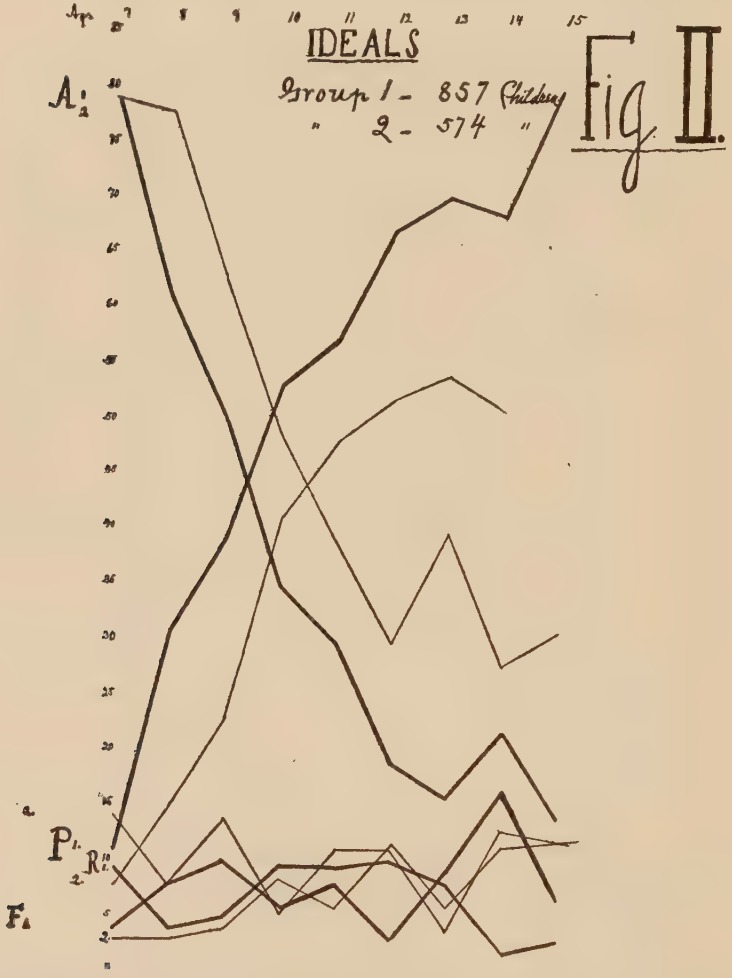
Ages		7	8	9	10	11	12	13	14	15	Totals
Number of Papers	Boys	54	67	92	95	98	96	79	71	37	689
	Girls	65	79	97	87	92	104	80	91	47	742
	Both	119	146	189	182	190	200	159	162	84	1431
Acquaintances	Boys	68.5	57.	47.	23.	20.	12.5	11.	10.	.0	27. %
	Girls	86.	75.	62.	56.	46.	32.	37.5	34.	36.	51. %
	Both	78.	66.5	54.5	39.	33.	22.5	24.5	23.	20.	39.5%
Father or Mother	Boys	33.	19.	20.	7.	11.	6.	4.	.0	.0	11. %
	Girls	28.	14.	15.5	10.	6.5	8.	6.	8.	.0	11. %
	Both	30.	16.	17.	9.	9.	7.	5.	4.	.0	11. %
Other Relative	Boys	15.	13.	6.5	3.	2.	.0	6.	.0	.0	5. %
	Girls	9.	4.	4.	5.	1.	.0	4.	6.	.0	3.5%
	Both	12.	8.	5.	4.	2.	.0	5.	3.	.0	4. %
Other Acquaintance	Boys	21.	24.	21.	13.	7.	6.	1.	10.	.0	11. %
	Girls	49.	57.	42.	41.	38.	24.	27.5	21.	36.	37. %
	Both	36.	42.	32.	26.	22.	15.5	14.5	16.	20.	24. %
Public and Historic Persons	Boys	15.	36.	40.	63.	66.	79.	85.	79.	95.	62. %
	Girls	3.	14.	24.	31.	38.	42.	41.	41.	42.5	31. %
	Both	8.	24.	32.	48.	53.	60.	63.	57.	65.	46. %
President	Boys	.0	.0	.0	3.	.0	1.	5.	1.	3.	1. %
	Girls	1.5	.0	.0	.0	1.	1.	.0	1.	.0	.5%
	Both	1.	.0	.0	2.	.5	1.	2.5	1.	1.	1. %
Historic American	Boys	11.	31.	33.	50.5	60.	71.	73.	72.	78.	54. %
	Girls	1.5	14.	22.	26.	22.	33.	27.5	30.	32.	24. %
	Both	6.	22.	27.	39.	41.5	51.	50.	48.	52.	38. %
Historic Foreigner	Boys	.0	.0	4.	6.	5.	2.	4.	3.	13.5	4. %
	Girls	.0	.0	2.	3.	11.	5.	10.	4.	8.5	5. %
	Both	.0	.0	3.	4.	8.	3.5	7.	3.	11.	4. %
Misc. Public	Boys	4.	4.5	3.	3.	1.	5.	2.5	3.	.0	3. %
	Girls	.0	.0	.0	1.	4.	4.	4.	5.5	2.	2. %
	Both	2.	2.	2.	2.	3.	4.5	3.	5.	1.	3. %
Character from Fiction	Boys	7.5	3.	9.	6.	5.	2.	1.	7.	3.	5. %
	Girls	9.	10.	12.	3.	10.	13.	11.	20.	13.	11. %
	Both	8.	7.	11.	5.	7.	8.	6.	14.	8.	8. %
Religious Persons	Boys	9.	4.5	4.	7.	8.	6.	2.5	4.	3.	6. %
	Girls	1.5	1.	2.	9.	6.5	12.5	10.	5.5	8.5	6.5%
	Both	5.	3.	3.	8.	7.	9.5	6.	5.	6.	6. %
God	Boys	5.5	.0	1.	5.	.0	1.	1.	.0	.0	2. %
	Girls	1.5	1.	1.	.0	1.	2.	4.	.0	.0	1. %
	Both	3.	1.	1.	3.	.5	1.5	2.5	.0	.0	1.4%
Jesus	Boys	.0	3.	1.	2.	3.	4.	.0	3.	3.	2. %
	Girls	.0	.0	1.	8.	4.	10.	5.	5.5	6.	5. %
	Both	.0	1.	1.	5.	4.	7.	2.5	4.	5.	3.4%
Persons from Bible	Boys	4.	1.5	2.	.0	5.	1.	1.	1.	.0	2. %
	Girls	.0	.0	.0	1.	1.	1.	1.	.0	2.	1. %
	Both	2.	1.	1.	.5	3.	1.	1.	1.	1.	1. %
Opposite Sex Chosen	Boys	17.	21.	15.	11.5	6.	7.	1.	1.	.0	9. %
	Girls	11.	15.	32.	34.	39.	43.	42.5	34.	36.	32. %
	Both	13.	18.	31.	22.	22.	26.	22.	20.	20.	21. %

of the writer in utilizing the unsatisfactory data of the preliminary text was not for any expected value of content, but rather to enable him to develop expeditious methods of handling such data through the medium of class work. It also



was in response to the suggestion that the element of subjectivity of opinion in the observer played a too large part in some of the earlier child-study researches, and that some of these had not even been submitted to the precaution of having analysis and calculations made by a second person. Space

does not warrant the publication of the results of this preliminary test as related to the subjectivity and to the inaccuracies of the three pairs of workers. Suffice it to note that, although encouraged to care and accuracy by the instructor,



the graphic representations made by the students revealed several points of difference ranging from one to eight per cent, differences attributed to varying classifications, and to mechanical inaccuracies. Each member of this class had

done at least minimum college work in the sciences—physics, chemistry, biology, psychology.

The present larger study is based upon papers secured from white children in schools in opposite localities of the city. One school is situated in a somewhat new and popular residential section; the other in an old but, perhaps on the whole, less prosperous locality. Printed blanks were used upon each of which was printed the question: Which person (among those you have seen, or thought of, or heard of, or read about), would you most like to resemble? Why?

The writer instructed the teachers who gathered the data how best to avoid in the children suggestion, imitation, frivolity; and he explained the necessity of obtaining serious, spontaneous replies. Confusion or irregularity in distributing and in collecting the papers were to be guarded against. In the case of the youngest children with whom handwriting was difficult, the teacher was to question each child individually and herself record the answer. To this end a conference was held with the principal and teachers, after school upon the day preceding the test (Spring of 1910). At the conclusion of the explanations a typewritten circular repeating the careful instructions already made orally, was given to each teacher, and along with it the package of question-blanks for her pupils. The replies were gathered promptly, and after division into bundles according to sex, by the teacher, were returned to the writer. The precautions taken and the interest and carefulness of the teachers led to the opinion that the papers are as reliable as can be expected in such endeavors with children.

Comparison of Methods

The assumption (as by Barnes and Goddard) that "100 papers of each age of each sex is the most satisfactory number" could not be tested exactly by means of our material, owing to the fact that using this method we were able to muster only 100 papers for each age, 50 of each sex, for practice work by a college class. However, the material was worked over and classified, and the calculations of the two methods were made separately by different persons.

In the first instance the writer alone analyzed the data for both groups combined and also separately for each school. He found the percentage for each item in each age by using the actual number of answers received. An inconsiderable number of blanks (one to four) at each age, "(no answer)" papers, were returned according to instructions, except in the case of children seven and eight years of age. It was reported that practically all of the children replied except in

case of these youngest children, the answers of whom the teachers recorded after individual questioning. It was difficult to obtain the full quota therefore in the lowest grades. Our calculations are based upon the actual number of replies as principals rather than upon the whole number of children in a room since it was believed that the error of selection within the school was confined almost entirely to the two lower grades; and this was due to limitation of time rather than to choice. Goddard—(*Ped. Sem.*, Vol. XIII, No. 2, p. 209) includes those "not answering" in his principals.

In the second instance 50 papers of each sex and age were used—making a total of 100 for each age. Here the group of college students were put into service, they utilizing the work for class room use. The aim was to furnish a comparison with the "actual number" method of calculation used in the first instance, as well as again to modify the factor of the subjective opinion of the writer who made the analysis above. In this second analysis the replies were read carefully before four students by the instructor or a pupil, and each student kept her own record; debatable points of classification were decided by vote after discussion. There is of course an advantage in time and speed where 100 papers of each are taken. The first method involved tedious copying, checking and calculating of hundreds of percentages all of which had to be gone over more than twice to insure accuracy. The actual results in our case got by the two methods do not differ considerably.

We shall use in what follows the percentages used for Fig. I. This shows in detail the percentages after combining the two groups—a total of 1,431 children from 7 to 15 years of age. The number of papers from 16 to 17 years was not large enough to be used—(They are indirectly *prima facie* evidence of cases of retardation). (See Table I.)

The Content

1. *Father and Mother.* The presence in consciousness of father or mother as an ideal is represented at the different ages for each sex as follows:

Table II

	Tennessee	7	8	9	10	11	12	13	14	15	years
Father or Mother as Ideals	Boys	33.	19.	20.	7.	11.	6.	4.	0.	0.	
	Girls	28.	14.	15.5	10.	6.5	8.	6.	8.		
	Both	30.	16.	17.	9.	9.	7.	5.	4.	0.	
	California (Barnes)										
	Boys	14.	10.	10.	8.	2.	1.	1.			
	Girls	23.	17.	11.	11.	6.	6.	8.			
	Both	18.5	13.5	10.5	9.5	4.	3.5	4.5			
	German (Goddard)										
	Boys	58.	34.	36.	22.	12.	10.	4.	14.		
	Girls	29.	33.	17.	16.	12.	15.	17.	10.		
	Both	43.5	33.5	26.5	19.	12.	12.5	10.5	12.		

Our results tally with other investigations in that (1) parental influence seems to diminish with age (2) with other American investigations in that father and mother are mentioned less frequently than in the German group of Goddard. Our figures do not show age for age, that either boys or girls largely predominate in this choice. It has been lamented that the large choice of parent or acquaintance as ideals is symptomatic of "narrowest sort of life," although it is also averred that we do not know "the best rate of expansion of the child's personality." To the contrary, where home life is wholesome—a large choice of such ideals seems to us ethically desirable. A large and earlier choice of public characters might be evidence of anything but normal "development of soul"—but rather of disillusionment, precocity or where the influencing personalities are unworthy, the exchanging of one's birthright for a mess of pottage. It depends upon the home and the kind of parent. The enumeration of historic and public characters about to follow indicates for our children a wide and rich range of ideals, with exceptions; nevertheless in a country whose people notably cherish home life, I should have preferred to see our percentages of preference for father or mother higher than they are.

2. *Other Acquaintances, playmate, teacher, etc.* The sex differences in regard to choice of "other acquaintances" as ideals are as follows:

Girls obviously predominate in this choice (37% as compared with 11%). The results agree in general with other American studies.

3. *Historical or Contemporaneous Public Persons.* Not including Bible characters, under this division the boys lead throughout, age for age; or as totals, boys, 62% compared with girls, 31%. This is similarly true in both groups. In this list are included some (about 12) miscellaneous public characters, vaguely defined as "actor," "fireman," "great soldier," etc. Historic or public Americans predominate.

The actual characters mentioned by both boys and girls are as follows. The figures are numbers of papers.

	Boys	Girls
Geo. Washington	213	102
Robert E. Lee	37	5
Andrew Jackson	15	4
Sam Davis	15	3
Roosevelt	14	1
President	12	4
Rockefeller	11	2
James Robertson	8	13

Columbus	6	6	
Lincoln	6	3	
Longfellow	5	17	
Edison	3	1	
Stonewall Jackson	3	1	
Rosa Bonheur	3	4	
Shakespeare	2	1	
Senator Carmack	2	1	
Robert Fulton	2	1	
Bonaparte	1	1	
Charles Kingsley	1	1	
	359	171	Total 530.

CHARACTERS MENTIONED BY BOYS ONLY

John Sevier	4	Marion Francis	2
Daniel Boone	3	Cabot	2
Eli Whitney	3	Dr. Cook	2
U. S. Grant	2		

Mentioned once each: Socrates, Michael Angelo, Bruce, Farragut, General Forrest, Patrick Henry, W. J. Bryan, Eugene Field, R. L. Stevenson, E. A. Poe, Dickens, Prince Albert, John Stuart, President Elliot, Lewis Carroll, George Wright, and O. Wright, Andrew Carnegie, Marshall Field, Magellan, Capt. Lawrence, Dave Warfield, Tom Thumb, Kermit Roosevelt, Mrs. Alice Hegan Rice, Flanders (Auto man) Ellis (writer) Miscellaneous 15. *Total 61.*

CHARACTERS MENTIONED BY GIRLS ONLY.

Martha Washington	3	Peary	2
Walter Scott	3	Missionary	2
Clara Barton	2	Mozart	2

Mentioned once each: Mrs. John Sevier, Mrs. James Robertson, Pocahontas, Joan of Arc, Queen Wilhelmina, Queen Isabella, Alice Cary, Cecil Chaminade, Whittier, Bulwer Lytton, Augusta E. Wilson, John Trotwood Moore, Alex. Campbell, Peter, Prescott, Helen Keller, W. A. Dromgoole, General Greene, Queen of Servia, Bertha Clay, Helen Taft, Halley, Patti, Calvé, Beethoven, Hans Andersen, Prince Henry, Annie Fellows Johnson, Marvin Evans, Rev. Jones, *Miscellaneous 8.* Total 54.

The above lists are an array in which it is difficult to find more than two or three ignoble characters—such as Cook and Jeffries—trivial exceptions. The variety of heroes, pioneers, statesmen, writers, artists, soldiers, musicians, sailors, invent-

ors, men of business, represents the content of some of the world's best biography—and we have not included in the above lists distinctly Bible characters. This wide range, while attesting individuality of choice and considerable culturistic environment, nevertheless is surprisingly short or scattered, when the writer recalls that Nashville and Tennessee are rich in historic interests and celebrated characters, whose memory there is perpetuated upon the printed page, by tradition, in story and by mouments. It would seem natural that strong and historic characters of the South such as the following would appear more active in the consciousness of these Southern children: Robert E. Lee, Abraham Lincoln, Andrew Jackson, Sam Davis, James Robertson, Stonewall Jackson, John Sevier, Daniel Boone, Farragut, Henry Clay, David Crockett, not to mention scores of contemporaneous characters from Tennessee, eminent in other states.

The opportunity exists in Tennessee as elsewhere to build more upon the circle of interests nearest home a discriminating sentiment and inspiration for the strong and heroic in human life.

4. *Characters from Fiction, Myth and Story.* There is evident, as in other studies, the comparatively slight influence of fiction-ideals. (See Figs. I and II.)

As glaring exceptions the influence of the cheap novel appears. These heroes of the novel are relatively unimportant and many more excellent characters are mentioned; there is evident, as in other studies, an obvious lack of the rich material of myth, legend and folklore, with which the creative imagination of particularly younger children might be fed, if the material available amongst our people could be edited, selected and utilized for the good of the children. Fiction seems to influence the girls more than the boys in each group. Combining the groups, 11% of the girls and 5% of the boys chose deals from fiction.

Named by the boys there appear: William Tell 5, Crusoe 5, Fairy 5, Robin Hood 4, Miller of Dee 2; once each—Gabriel, Hiawatha, Rip Van Winkle, Alice in Wonderland, Rebecca of Sunny Brook, Capt. Kidd, Santa, Bear Hunter, Red Men, L. Grant, Herbert Carter, "Henry," R. Whitney—*Total 34.*

A more varied list is made by the girls: Little Colonel 16, Elsie Densmore 6, William Tell 3, Evangeline 5, Cinderella 3, Red Riding Hood 3, Santa 3, Snow White 2, Silver Locks 2, Queen 2; once each, Aladdin, Crusoe, Rose Red, Rose Campbell, Elizabeth, Hiawatha, Benn Starr, Dora Dene, Genevia, Grace Darling, Fairy, King, Queen, Jewel, Elaine, Girl in S. S. Story, Caroll Bird, Dorothy in Wizard of Oz, Dorothy, Dorothy Dainty (adv). Barefoot Boy, Fairy, Lady in Fairy

Book, Princess, Mrs. Wiggs, St. Valentine, Minnehaha, Tar Baby, Clara in Mammon, Contented John, Mrs. Wentwood in Burglar's Daughter, Fanny in Tempest and Sunshine, Indian Princess, Betsy Lewis and Missy in Little Colonel books, "Girl,"Grace Darby, Jack in the Bean Stalk, Alice Longfellow. Total 85.

5. *Religious Characters.* The convenient tabulation of Goddard (*Ped. Sem., loc. cit.*) shows the relative position of the distinctly religious characters including God, Jesus, and Bible characters as observed in similar investigations in different parts of the world. Our percentages are likewise small. The general agreement of all these studies is that religious characters are named with the least frequency as compared with ideals chosen from acquaintances, public persons or fiction. This consensus demands the attention of the forces of organized religion whose vocation is to keep alive the spirit of religion. Several hypotheses may be offered to explain this paucity of ideals. (1) The low percentages for religious characters is about proportionate to the relative time and effort spent upon Bible and religious study by the average child, as compared with the work of the day school. Once a week at Sunday school as compared with every day at the public school can hardly yield much greater results. One cannot assert, at least upon the basis of these figures, that the actual teaching method of the Sunday school is totally ineffective, when the amount of time available is considered. (2) The home evidently is not successful to-day in arousing permanent admiration for Bible and religious characters. (3) Perhaps these characters are felt by the child as being remote, intangible, inapplicable to present day conditions. Orthodoxy does not emphasize enough the human side of Christ and therefore the child may not place Jesus in the category of "persons." If all this be true, we have here a new emphasis upon the need for a social application, for a modernization of the gospel interpreted to cope with present conditions. (4) A reticence in mentioning "religious characters" doubtless is one factor. If the data were got within the walls of a Sunday school room, perhaps results might appear very different.

For making more vital the influence of the religious and moral heroes, the present writer ventures to suggest to sincere religionists the following practical expedients. For adults let there be organized classes or societies in our churches for the purpose of studying and investigating the actual social conditions in local communities, as regards the problems of poverty, sanitation, public and benevolent institutions, as jails, hospitals, asylums and the problems of civic improvement. This will bring to light the demands for applied

religion. Then for children let there be tried more fully a revival of the ancient art of story telling to make more vivid and permanent the character—ideals through which as personalities it is desired to convey the chosen principles of applied religion. The method of the story was the method of the great Teacher

Opposite Sex Chosen

The often remarked fact brought out by the results of Barnes and Goddard that girls choose male ideals to an undesirable extent appears again in our returns. Of the girls, 32%, and of the boys, 9% chose as ideals characters from the opposite sex. It is surmise to state whether this is due to growing dissatisfaction with the limitations traditionally as well as naturally restricting women, or due to there being more male ideals to choose from. Perhaps both factors are operative. It appears to the present writer that we do not stress enough in story, reading, picture, and song the noble qualities of available female characters contemporaneous and in history.

That the male ideal is commonly made more conspicuous in history and in current events, and that the imitativeness of the child is affected through the examples most vividly presented—rather than by some peculiar dissatisfaction with her sex, seem adequate hypotheses to explain this choice of male ideals by the average girl. In order to point to these factors, however, one need not deny that a sense of ill-adaptation to cope with the demands of life is too common in some young girls because of our artificial modern environment.

Groups T and H Contrasted

At every age the children of Group H lead in the choice of Acquaintance-Ideals. Totals: Group H, 47%, Group T, 34%. At every age Group T leads in the choice of Historic or Public Persons; Group T, 52%, Group H, 37%. In each group Religious or Bible ideals total about 6%. The earlier years of childhood in Group H and the later years of Group T seem the more influenced by such characters.

In regard to the use of data of this kind for minute comparisons of groups, races, etc., the present writer is not enthusiastic. It seems questionable whether any but the largest and most obvious differences in these curves should be given weight in contrasting the characteristics of national or racial groups, particularly when slightly different methods may have been used. The summarizing curves exhibited by Goddard therefore, of German, New Jersey, California, and Minneapolis studies must be used with caution. Such curves of group

data are extremely sensitive to the element of imitation or suggestion and therefore minor variations at any age must be checked by more studies before we indulge in dogmatizing. Upon the face of our returns it may be seen that there is about as much difference between our two groups in the same city and of same race as there is between results got in different states or countries. Waiving fine points of difference in these crude studies, we may find some facts of general agreement or of comparison. (See Fig. II.)

Conclusions

1. *Practical value to students of pedagogy.* Whether one catalogues studies such as the above as of "human nature," "ethics," or "psychology" it appears that considerable value may be gained by the moderate expenditure of time upon similar studies by classes in education. A statistical study of ideals of school children appeals to the writer as belonging properly to the sphere of experimental pedagogy, since it acts as a test to reveal a crude portrayal of some of the actual results of educative procedure. The material of such a group study is more illustrative, suggestive and stimulating than conclusive and is doubtless unusually sensitive to the influences of suggestion and imitation. A variation at a given age, especially in moderately large groups, might be due more to the contagion of a whispered suggestion influencing a dozen or more children than to the designated factors. Furthermore, the age error makes only approximate, within six months, the years named. Other questions may be raised, *e. g.*, the psychological nature of the complex mental fact we are attempting to measure; and it might be interesting to contrast the results of several repetitions of this test of ideals made at intervals upon the same group of children in order to observe the reliability of a single performance of the children, or upon similar groups in dissimilar surroundings. It would be unwarranted to generalize upon fine points of difference. The large general differences and tendencies in childhood verified in the case of large groups, however, seem well established, *e. g.*, the diminution of acquaintance ideals, the multiplication of ideals from public characters, and the paucity of religious characters cited. Without overestimating the value of this one example of the class of work, we would suggest its revival and repetition.

As practice work, where the easier method of calculation is used, a repetition of this early child-study investigation seems worth while, because one can utilize within a few days' time the data for class work. Aside from the consideration of the

specific topic, some indirect benefits have accrued in the experience of the writer with small groups of students, in that the work naturally gave rise to discussion of statistical methods, to an attempt to devise standard procedure, to the sifting of generalizations, and the developmental process was illustrated by the resulting curves.

2. *Ethical value of study of ideals.* A simple study of the ideals of a group of children offers some other values to students of education. Educational psychology and experimental pedagogy are concerned chiefly in learning *how* to make changes in human beings. What kind of changes to make or the what and the why are equally important problems lying within the domain of ethics, although metaphysical inquiries regarding morality do not seem to produce much good fruit. We catalogue in our histories of education the characteristic aims of races or peoples, such as the "passivity" of the East, the "activity" of the West, the "culture," of the Greeks, the "efficiency" of the Romans, the "discipline" of the Middle Ages, or the ideals of knowledge, development or character as we follow Comenius, Rousseau or Herbart. Perhaps we formulate as the modern aim of education the resultant or synthesis of such of the above elements as are desired for social life, the emphasis upon each to depend upon the exigencies of time or place. But this is not enough for students of education, for they should realize that the individual boy or girl must with more or less distinctness formulate those mental complexes known as our ideals, patterns or standards. These are the products of habit, and ideals focalized may in turn start new habits. They are an essential part of the developmental process as the child and his environment change. It seems, therefore, that such simple studies as the above present some added points of value, because with moderate effort upon the part of the student they forcibly bring to his attention typical data fresh from the minds of children; and concrete data are what force to recognition many of the questions of the *what* and the *why* in education in addition to the mere *how* of the experimentalist.

TWO THOUSAND NORMAL CHILDREN MEASURED BY THE BINET MEASURING SCALE OF INTELLIGENCE

By Henry Herbert Goddard, Ph. D., Vineland, New Jersey

Since the first publication of the measuring scale by Binet and Simon there have been few tests of the scale itself upon groups of children. Prof. Decroly and his associates in Belgium have made the most important contributions. But these have been upon small groups and rather select. Our own testing of four hundred feeble-minded children was the largest use made of it upon defectives.

It seemed very desirable to have the experience of this test upon a homogeneous group of normal children. With this thought in mind, arrangements were made in the fall of 1910, at the beginning of the school year, to test the entire school population of one complete school system. This system includes about five thousand population within a small city and as many more outside, so that we have, city and country, a school population of about two thousand children. The city referred to is, as will be seen, a small one, and not it is true, widely different from the country except that the population is not of course engaged in farming.

The tests were made by five assistants from the Research Laboratory of the Training School at Vineland. These persons were all expert in the use of these tests, having been trained in the laboratory. The method of procedure was for two or more teachers, according to the number of rooms in the school, to go to a school and test out the children there, at one sitting if possible. In a very few cases it was necessary to go back a second time. The examiner was provided with a small table and a couple of chairs in an ante-room or in the hall. When everything was ready the teacher sent out a child, who was tested and returned to the room, when another child came out, and so on with practically no disturbance of the school. The work began always with the lowest grade so that if there were any tendency for the children to tell the others it would be minimized because the younger children

could not tell the older ones anything about their questions. However, experience proved that there was practically no attempt to coach any children in regard to the answers. Indeed such coaching would have been largely useless because no answer was ever criticised and the child was made to feel that his answer was satisfactory, therefore had no reason to look it up or talk about it, and, if he told another child, was as likely to tell a wrong answer as a right one. A few cases where there had been some telling, evidently without any thought of dishonor, the child who had thus been told was found to be unable to retain what had been told him, *if it was something that was beyond his normal mental age.*

In other words, there were obtained in these cases, evidences of two things: first, that the Binet Scale was wonderfully accurate; and second, that a child cannot learn the things that are beyond his grade of intelligence. He may be drilled upon them but can only give rote work and will fall down upon them if carefully questioned. So that the whole matter of the children explaining to each other was practically without any influence upon any of our results.

The examiners, while all more or less trained, differed considerably in experience so that the result was that the number tested in the school day varied from twelve to thirty at the beginning. Those who did twelve rapidly increased in the number they could do, while those who did thirty were practically at their maximum at the start. No children were tested at recesses or outside of school.

In the seventh and eighth grammar grades and the high school, the children were tested in groups, the papers being given out to them at their desks and they turning them right side up at the signal and beginning to answer the question. The results in these grades will be considered later in this paper. All others were done individually.

We were interested to discover to what extent the personal equation of the examiner affected the results and accordingly on each second day for the first week and a half, the work of each examiner was subjected to examination, by drawing the curve of distribution for her cases. With the exception of one case, where the method of crediting one question had been misunderstood, the differences in the different examiners was practically a negligible quantity so that it was entirely safe to put all the results together and compare them as though they had been made by one examiner. This was an important item since it demonstrated that the value of the tests is not noticeably affected by the personal equation—provided of course the examiners have mastered the method and are temperamentally fit for such work with children.

The method of procedure by each examiner was usually to say "Do you want to come and play with me? Let us look at these pictures," and then to begin by showing the child the pictures of test number 4 for three-year-olds and also number 6 for seven-year-olds. The way in which the child received and talked about the pictures would usually enable the teacher to determine about where to begin. If she was uncertain from this she would probably begin with the questions set for the child's age. If the child failed on any of these questions she would go back a year, and if a child answered these questions she would go on with the next year and so on until she was sure the child's limit had been reached. No attempt was made to have every child answer all of the questions for all ages since the purpose of the examination was primarily to determine the mental condition of the child, whether normal, backward, or precocious.

If the child was backward, then the examiner went back until she found that the child could answer at least all but one for the given year.

It may be stated in passing that none of the fears that naturally arise in the mind of one who is new to the method was realized. The children almost without exception were eager for the tests, did their best and were much pleased with the result. That was true whether they were *at age, above age,* or *below.* Of course part of this was due to the method because the child was *never scolded,* was never even told that he had failed, but *always encouraged,* told even that he had done well, the examiner considering that whatever he did, was well for him. If the child made a mistake so obvious that he was conscious of it himself, the examiner passed over it as lightly as possible, mentioning something that would be a good excuse for such a slip, and so making the child comfortable. In this way we believe that we got the best from every child that was examined.

The results, so far as the children in the first six grades are concerned, are shown in the following distribution curve, whereon is seen that five hundred and fifty-four children tested exactly *at age.* That is to say, they did the questions for their respective ages. Three hundred and twenty-nine tested one year above, and three hundred and twelve tested one year below. Again forty-nine were two years above the average, fourteen were three years above, and two were four years above, while one hundred and fifty-six were two years below; seventy-nine three years below; thirty-seven four years below; eight, five years; six, six years; and one seven years below; making a total of fifteen hundred and forty-seven in these six grades, who were tested.

CHART I.

Table I shows the distribution of the entire 1,547 children in *mental* age and physical age.

One sees just how many were backward "at age" and precocious for each physical age.

TABLE I

Age	MENTAL AGE *												
	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	Totals
4 yrs.		1	**2**	2	3								8
5 "	2	4	8	**40**	40	16	4						114
6 "	1	0	3	29	**48**	69	9	0	1				160
7 "	0	1	2	8	15	**114**	50	4	3				197
8 "			2	2	1	87	**86**	16	12	3			209
9 "						27	54	**56**	58	4	2		201
10 "					3	15	24	19	**124**	27	8	2	222
11 "					1	4	13	25	50	**60**	12	1	166
12 "						4	10	13	42	36	**39**		144
13 "						1	5	6	30	19	21	**7**	89
14 "							1	1	6	5	4	3	20
15 "								3	0	1	2	0	6
Totals	3	6	17	81	111	337	256	143	326	155	88	13	1547

* In these tables Roman numerals stand for *Mental Age* as determined by the Binet tests. Arabic numerals when used for *Age* denote physical or chronological age.

The heavy faced figures show those "at age."

For example, of the four-year-old children, 1 tested to the mental age of III, 2 tested IV, 2 tested V, and 3 tested VI, that is to say, they had the mental development of average children of those respective ages.

To a person familiar with statistical methods the foregoing curve of itself, amounts to practically a mathematical demonstration of the accuracy of the tests. The results could not arrange themselves on this curve, which is recognized at once as practically a normal curve of distribution, if the questions were not carefully graded. Secondly, if they were not right, age for age, but were too hard or too easy, the largest group would not be one *at age*, but would be a year below or a year above according to whether they were too hard or too easy. Consequently, we are forced to the conclusion that the questions that Professors Binet and Simon have selected are well graded, at least from the ages of five to twelve, and that they fit the ages to which they are assigned.

The significance of these figures obtained from the general results is very great. There is every reason to believe, and statisticians confirm this, that any group of two thousand children may be taken as a fair sample of conditions to be found in any number of children in any country. Consequently, whatever proportions or percentage are found here may be taken to be very closely the standard to be found elsewhere.

Bearing this in mind it becomes very significant when we find that we have 78% of the children practically normal and satisfactory—for we allow those children who are one year above and one year below to pass with the central group as satisfactory children. It is probably true that in a school system which is ideally conducted, where the superintendent has sufficient help to do all that he wishes to do, these children a year ahead and a year below would be looked into a little closer to see if there was any reason for this. But in the main, it is not a significant difference. But when we come to those that deviate more than that, we have conditions that are of importance. Of those more than a year above age, we have 4% and this is certainly significant. Four per cent. of the children in the first six grades of our public schools are especially well endowed,—what Whipple has called "gifted" children. They are born with a better brain or better protoplasm so that they have better endowments and greater capacity for doing school work. There seems to be no good reason why we should not recognize this and utilize it in our school work, giving these children the extra advantage which their natural endowment enables them to use, giving them a

broader experience and a broader education as they go through the grade. This probably does not mean that they should go through the grade faster, but that the course should be richer as they go.

On the lower side of the curve, we have first, those who are *two* and *three* years behind age. Experience teaches us that these are probably what we call *merely backward*. That is to say, they are not permanently arrested in their development. They constitute, as will be seen, 15% of the children in the first six grades. They need help and with help they may be advanced to come up to the normal, or if always slow, nevertheless they can learn enough to be useful and respected citizens, but they must have special help. The Special Class for the slow child is needed for these.

Then we come to those that are four years or more behind their "age", and here again experience is conclusive that children who are four years behind are so far back that they can never catch up, or in other words, they are where they are because there is a serious difficulty which can never be overcome—they are feeble-minded. These constitute 3% of the children in these grades. We shall not stop here to discuss the social significance of this and its importance to all students of social problems.

Educationally the conclusion is forced upon us that it is very unfair to the normal child to keep these children in the same class with him. They should be segregated and given a special teacher who understands their case and is allowed to train them as their mental condition will permit. Of course, ultimately they ought all to go to the institutions for the Feeble Minded where they will be cared for and prevented from contaminating society; but until this can be done, the special class for defectives is probably the wisest solution.

As already said, the curve shown, demonstrates the remarkable accuracy of the Binet measuring scale, but we were not quite content with this. We desired to know whether every question in the list was one that was rightly placed, because such is the skill with which the plan has been worked out by Binet that his method of counting enables one to state the results with great accuracy. In other words, the scale is very flexible. Prof. Binet provides that the method of counting shall be that a child is credited first with the mental age at which he has answered all of the questions but one: he is then to be advanced a year for every five questions that he can answer beyond that point, no matter where they are found. This, as we have said, gives a flexibility to the system which overcomes any peculiarities of training that the

child may be subject to, and so he measures up to his proper grade regardless of any accident in his training. But that being the case, it is still possible that some of the individual questions may be too hard or too easy for their age.

With the purpose of determining this, we have gone over every answer that has been given to every question and drawn up tables for this to determine just what percentage of children at the various ages can answer the different questions. The results of this are shown in the next table. (II.)

TABLE II

Physical Age	5		6		7		8		9		10	11	12	13
Mental Age														
III														
1	1	1	1											
2	1		1											
3	1		1											
4	7		7		1	1								
5	5		3		2									
IV														
1	14	1	5											
2	14		4											
3	13	2	5		1									
4	14		4	1	1									
V														
1	32	2	20		8									
2	23	11	22	3	10									
3	20	12	14	5	7									
4	30	4	18		8									
VI														
1	15	17	35	8	30	4	4							
2		21	5	27	7	20	2	3						
3	14	11	31	9	32	2	4							
4	9	6	35	6	23	2	7							
5	5	5	25	7	32	3	4							
6	13	13	35	8	39	2	7	1						
7	14	11	30	12	43	4	3	1						
VII														
1	3	3	24	14	87	9	34	3						
2		5	15	25	96	5	42							
3		1	4	18	88	10	37	2						
4	2	4	17	22	95	8	36	3						
5		1	7	27	77	26	36	7						
6	6	3	18	19	83	25	41	3						
7	2	1	24	9	94	5	34	1						
8		1	10	20	90	17	39	3						
VIII														
1				1	2	26	33	48	13	5				
2			1	4	46	49	79	14	17					
3		2	8	6	97	5	90	1	17					
4				1	17	47	74	15	16	1				
5					1	21	34	40	10	4				
6				1	52	16	87	2	17	1				

TABLE II—*Continued*

Physical Age	5	6	7	8	9	10	11	12	13
Mental Age									
IX.									
1			1 20	49 33	48 7	4			
2			13 11	85 4	55	2	1		
3			1	11 38	33 23	3	1		
4		1	1 3	19 27	45 27	3			
5			1	7 22	43 10	2 1	1		
6			1 1	16 24	44 11	3 1	1		
X.									
1			1	11 6	48 6	102 3	14	2	
2				5 4	31 14	104 5	10	2	
3				1	11 27	92 17	13 2	2	
4					21 13	98 8	8	2	
XI.									
1				1	7 10	67 34	48 4	3	
2					1 8	41 51	39 14	3 2	
3					1	8 10	35 3	3 1	
4					8	20 71	37 16	5	
5					2	9 28	35 9	3 1	
XII.									
1					1	8 29	23 28	37 7	2 1
2				1	2	18 7	45 5	44	3 1
3						8	5 30	15 21	2 2
4						1	20 3	40 3	2 1
XIII.									
1						1	4 8	10 29	4 1
2							2 3	7 17	4 1
3							4	7 17	4 1

EXPLANATION OF TABLE II

The left hand column gives mental age in Roman and the questions under that age in Arabic. For instance, V 1 means five years, first question. In the columns headed by Arabic numerals from 5 to 13, which stand for physical age, the first figure gives the number who answered that question correctly, the second figure, those who failed. For instance, in V 1, 32 succeeded, 2 failed at the physical age of five years, *i. e.*, they test "at age." They are five years old and they do the tests prescribed for five years. The next column to the right shows what six-year-old children do with the same question:—20 succeed, 0 fail. In the same way we may see what proportion of children younger than "at age" have succeeded. For in-

stance, in VII 3, we have "at age" (*i. e.* seven years) 88 to 10. Six-year-old children give 4 to 18, and eight-year-olds, 37 to 2. This shows that the question is rightly placed since it is too hard for six years—only 4 succeeding while 18 fail.

We consider that a question is misplaced in the scale if it is not answered correctly by about 75% or more, of those trying it.

It will be seen now, from looking over this table, that the following questions are misplaced because they are too hard. Question VI 2—the success and failures are "at age" 5 to 27, one year older, 7 to 20, two years older 2 to 3, so that even for children eight years of age, the question does not seem to be answered by even half, although the numbers here are of course too small to be very significant. Question VIII 1 is answered by 33 while 48 failed; one year older, 13 succeed and 5 fail. It is clear that this question is too hard for eight years. Again question VIII 5 is answered by 34 against 40 who failed, but one year older 10 succeeded and 4 failed. It should be transferred to a later age. Question XII 3 is answered by 15 while 21 failed. At one year older, the record is 2 and 2. IX 3 gives 33-23. More succeed than fail but the proportion is not large enough.

These five questions are the only ones that are positively too hard and should be transferred to a later year or else modified to make them easier.

Turning now to examine any questions that may have proved too easy, we find question VIII 3 is answered by 20 while 1 fails. Children one year younger answer this in the proportion of 27 to 5, and even two years younger in the ratio of 8 to 6. It is clear that we may safely transfer this to seven years. IX 2 is answered by 55 while 0 fails. One year younger, it is answered by 85 to 4, and two years younger by 13-11. This should be removed to eight years. Question X 1 is answered by 102 to 3, one year younger, 48 to 6, two years younger, 11 to 6. This, like the last one mentioned, should be put at least one year back. Question X 2 is answered by 104 to 5, one year younger, 31 to 14, two years younger, 5 to 4. XII 2, 44 succeed, 0 fails. One year younger, 45 succeed, 5 fail; two years younger, 18 succeed, 7 fail; three years younger, 3 succeed, 0 fails. This should be removed to one year younger.

The results given in Table II were those obtained by children, all of whom were graded "at age." That is to say, while a child may have failed on one question, he on the whole passed that age.

It seemed worth while to determine whether the same ratio approximately would hold good for those who were *above*

and *below* age. We have consequently worked out the same problem for those who were one, two and three years above and below age. That is to say, if a child is nine years old actually but tests only six, how has he succeeded with the six-year-old questions. Have such children, on the whole, succeeded and failed in about the same ratio as the children who are physically only six years?

An illustration will make the problem clear. Take question VI 1. By the children who are "at age" it is answered correctly by 35 while 8 fail. Of those who are a year above age (*i. e.*, precocious) 34 succeed and 8 fail, practically the same proportion. Those who are two years above, 4 succeed and 0 fails, while those who are one year *below* (*i. e.*, dull), 14 succeed and 3 fail. This is very close to the ratio of 35 to 8.

On the whole the results agree very closely. So whether a child is precocious or backward, he has about the same chance of succeeding with the questions that are *suited to his mental age.* This seems to be a striking confirmation of the accuracy and fairness of the test.

A question of considerable interest is to what extent have our ordinary methods of classification in the schools more or less consciously and accurately recognized the actual mental standing of the child. In other words, to what extent is it true that we somehow by our ordinary methods size up children about right and do not need any such thing as the Binet Scale in order to set us right.

In order to get at this we first found out how many children of those concerned in our study were above or behind school *grade* to the extent of one, two or more years, assuming that a six-year-old child should be in the first grade, seven years in second grade, etc. Table III gives this result. It also gives the number of children who were one, two and three years above or below school grade *according to the Binet Scale.*

TABLE III

Above grade according to school standard	150 = 11.6%
No. in grades ahead of what their mental ability as measured by the Binet scale, would warrant	121 = 9.4%
In right grade according to school standard	393 = 30 %
In right grade according to Binet scale	558 = 43.2%
Below grade according to school standard	659 = 51.1%
No. in grades below what their mental ability warrants	558 = 43.2%

By Years of Retardation

	1 yr.	2 yrs.	3 yrs.	4 yrs.
Retarded according to school system	361	186	90	22
No. children backward according to Binet scale	312	156	79	37
No. children in a school grade below that which their mental age would warrant	449	90	8	

It will be seen from a study of this Table that a somewhat smaller number are behind or above, according to the Binet Scale, than are behind or ahead of school grade. Now, provided these are the same children, we have a justification for the school procedure. For example, we see that 186 children are two years behind grade, that is to say, they are two grades below where their age would presumably put them, and we find also that 156 children are two years behind according to the Binet Scale. In other words, provided they are the same children, the school system is justified in keeping at least 156 of the 186 two years behind their grade. It only remains to account for that 30 which are behind grade but not backward according to the Binet Scale. They might easily be accounted for on the assumption of not having entered school at six years of age. But we shall see.

Analyzing our data so as to show exactly where each individual is, we find that the case is not as favorable as we suggested in the previous paragraph, that many children who are normal mentally are two or three or possibly four years behind their *grade.* We find a great many other children who are mentally dull, not as far behind their grade as their mentality would require. We find still worse conditions among those who are *ahead* of their age mentally. They are *not* correspondingly far ahead in their grade.

In other words, the two systems do not agree at all. Now, having satisfied ourselves that the Binet Scale is the most accurate method that we have of determining intellectual ability in children, the question at once arises, how much injustice is being done these children by the ordinary school routine? We are not now concerned with criticising this particular school system, consequently we do not care what may be the answer to this question in this particular case. We are merely concerned to point out that the conditions found here are probably typical, and that by the use of this method, any superintendent may examine his system of schools, and determine with considerable accuracy whether each and every child is in the grade that his mental ability actually warrants. Of course, it is evident that a child may have the mental ability of eight years, but if he has never been to school he

must be in the first grade for a time at least. But on the other hand, he should not be in the third grade two years later when he is ten years old mentally. As the years go by, he should get through with the mechanics of the learning process in the elements, and be up to what his mentality warrants.

TABLE IV. Section *A*—at age

Age		Grades						Totals				
Physical	Mental	1st yr.	2d yr.	3rd yr.	4th yr.	5th yr.	6th yr.	No. tested	No. in normal grade	No. retarded	No. advanc'd	Below school age
4	IV	1						1	1			1
5	V	24	1					25	24		1	25
6	VI	**31**	2					33	31		2	
7	VII	31	**57**	6				94	57	31	6	
8	VIII	13	30	**33**	8	1		85	33	43	9	
9	IX		4	14	**26**	3		47	26	18	3	
10	X		2	4	37	**41**	14	98	41	43	14	
11	XI				2	28	**18**	48	18	30		
12	XII				2	14	20	36		36		
13	XIII						4	4				
Totals		100	96	57	75	87	56	471	231	205	35	26

TABLE IV. Section *B*—1 yr. backward

Age		Grades						Totals				
Physical	Mental	1st yr.	2d yr.	3rd yr.	4th yr.	5th yr.	6th yr.	No. tested	No. in normal grade	No. retarded	No. advanc'd	Below school age
4	III	1						1				1
5	IV	4						4				4
6	V	19						19				19
7	VI	**14**	2					16	14		2	
8	VII	21	**39**	6				66	39	21	6	
9	VIII		12	**26**	3			41	26	12	3	
10	IX			5	**13**	6		24	13	5	6	
11	X		1	3	8	**21**	6	39	21	12	6	
12	XI			1	1	10	**24**	36	24	12		
13	XII					5	13	18		18		
14	XIII						1	1		1		
Totals		59	54	41	25	42	44	265	137	81	23	24

TABLE IV. Section *C*—2 yrs. backward

Age		Grades						Totals				
Physical	Mental	1st yr.	2d yr.	3rd yr.	4th yr.	5th yr.	6th yr.	No. tested	No. in normal grade	No. retarded	No. advanc'd	Below school age
6	IV	2						2				2
7	V	8						8				8
8	VI	4	1					5	4		1	
9	VII	6	8	10	1			25	8	6	11	
10	VIII	1	5	13	9			28	13	6	9	
11	IX		1	4	6	5	1	17	6	5	6	
12	X				15	13	5	33	13	15	5	
13	XI					5	11	16	11	5		
14	XII					1	3	4		4		
	Totals	21	15	27	31	24	20	138	55	41	32	10

TABLE IV. Section *D*—3 yrs. backward

Age		Grades						Totals				
Physical	Mental	1st yr.	2d yr.	3rd yr.	4th yr.	5th yr.	6th yr.	No. tested	No. in normal grade	No. retarded	No. advanc'd	Below school age
7	IV	1						1				1
8	V	2						2				2
9	VI	0						0				
10	VII	1	7	4				12	7	1	4	
11	VIII		1	7	4	1	1	14	7	1	6	
12	IX			7	7			14	7	7	11	
13	X				7	11	11	29	11	7		
14	XI						6	6	6			
15	XII						1	1	1			
	Totals	4	8	18	18	12	19	79	38	17	21	3

TABLE IV. Section *E*—1 yr. advanced

Age		Grades						Totals				
Physical	Mental	1st yr.	2d yr.	3rd yr.	4th yr.	5th yr.	6th yr.	No. tested	No. in normal grade	No. retarded	No. advanc'd	Below school age
4	V	1						1	1			1
5	VI	36						36	36			
6	VII	47	23	3				73	23	47	3	
7	VIII	3	23	18	2			46	18	26	2	
8	IX			12	12	3		27	12	12	3	
9	X			7	26	20	3	56	20	33	3	
10	XI				7	19	7	33	7	26		
11	XII					7	6	13		13		
	Totals	87	46	40	47	49	16	285	117	157	11	1

TABLE IV. Section *F*—2 yrs. advanced

Age		Grades						Totals				
Physical	Mental	1st yr.	2d yr.	3rd yr.	4th yr.	5th yr.	6th yr.	No. tested	No. in normal grade	No. retarded	No. advanc'd	Below school age
4	VI	**2**						2	2			
5	VII	14	**1**					15	1	14		
6	VIII	1	4	**1**				6	1	5		
7	IX			3	**0**			3	0	3		
8	X			1	6	**0**		7	0	7		
9	XI				1	3	**1**	5	1	4		
10	XII					2		2		2		
	Totals	17	5	5	7	5	1	40	5	35		

TABLE IV. Section *G*—3 yrs. advanced

Age		Grades						Totals				
Physical	Mental	1st yr.	2d yr.	3rd yr.	4th yr.	5th yr.	6th yr.	No. tested	No. in normal grade	No. retarded	No. advanc'd	Below school age
5	VIII	2	1	**0**				3	0	3		
6	IX				**1**			1	1			
7	X			2	1	**0**		3	0	3		
9	XII				1	1	**0**	2	0	2		
10	XIII					1	2	3		3		
	Totals	2	1	2	3	2	2	12	1	11		

TABLE IV. Section *H*

Gradation According to Physical Age

Phy. Age	Grades						Totals				
	1st yr.	2d yr.	3rd yr.	4th yr.	5th yr.	6th yr.	Whole number tested	No. in normal grade	No. retarded	No. advanced	No. in school bel. age
4	5						5				5
5	80	3					83				83
6	**100**	29	4	1			134	100		34	
7	57	**82**	29	3			171	82	57	32	
8	40	70	**52**	26	4		192	52	110	30	
9	6	24	57	**58**	27	4	176	58	87	31	
10	2	14	26	66	**69**	23	200	69	108	23	
11		3	14	20	62	**32**	131	32	99		
12			8	25	37	49	119		119		
13				7	21	39	67		67		
14					1	10	11		11		
15						1	1		1		
Totals	290	225	190	206	221	158	1290	393	659	150	88

TABLE IV. Section *J*

Gradation According to Mental Age

Men. Age	Grades						Totals				
	1st yr.	2d yr.	3rd yr.	4th yr.	5th yr.	6th yr.	Whole number tested	No. in normal grade	No Retarded	No. advanced	No in school bel. age
III	1						1				1
IV	8						8				8
V	54	1					55				55
VI	87	5					92	87		5	
VII	120	135	29	1			285	135	120	30	
VIII	20	76	98	26	2	1	222	98	96	29	
IX		5	45	65	17	1	133	65	50	18	
X		3	17	100	106	39	265	106	120	39	
XI			1	11	65	67	144	67	77		
XII				3	30	43	76		76		
XIII					1	7	8		8		
Totals	290	225	190	206	221	158	1290	558 43.2%	547 42.4%	121 9.4%	64 5%

TABLE IV. Section *K*

Total misplaced by years

According to	Retarded				Advanced		
	1 yr.	2 yr.	3 yr.	4 yr.	1 yr.	2 yr.	3 yr.
Physical Age	361	186	90	22	134	15	1
Mental Age	449	90	8		116	3	1

Table IV gives the foregoing comparisons. Section A. shows the number of children who are the same age *mentally* as *physically* and gives the number for each age in each grade. For example of the children who are eight years old both *mentally and physically*, there are 13 in the first year, 30 in the second year and 33 in the third year, 8 in the fourth year, one in the fifth year. These children, having the mentality of eight years would naturally all be in the third year of school. Consequently the 13 are two years behind what they should be and 30 are one year behind, 33 are in their right place, while 8 are a year ahead of what their mental endowments would probably permit and one is two years ahead.

In the same way we see the condition for each age from four to thirteen. At the right are given the totals. The total number of each age tested, the number that are in their proper grade according to their mental endowments as determined by the Binet tests, the number who are retarded and

the number advanced. The footings show the total number of children in each grade.

Section B. of this table shows the children who are mentally *one year behind* their physical age, the children who are really eight years but test seven, nine and test eight, etc. Reading this as the former section, we can see that of the eight year children, 21 are in the first year of school, 39 are in the second year and 6 are in the third year. Being seven years old mentally, they should of course be in the second school year and 39 of them are found here, but 21 of them are only in the first year, while 6 of them are in the third year, a year ahead of what their mentality warrants. Similarly for the other years.

Section C. shows the same thing again for those children who are *two* years behind their physical age. They are, for instance, eight years old but test only six.

Section D. shows those who are *three* years behind their age. For example, the children who are ten years old, test only seven.

How imperfectly we do justice to these backward children is well seen in the totals on this chart. Of 79 children of this class, 38, almost exactly half, are in their proper place according to their mental ability while the remainder are divided into fairly equal groups, 17 being below what they ought to be and 21 being ahead.

Sections E., F. and G. show the distribution in a similar manner of those who are ahead of their physical age.

The most noticeable thing in these sections is the small number of children who are advanced and the still smaller number who are even up to what their mental ability would warrant. For example, referring to the totals of those who are one year ahead of the average child (Section E.), 117 are properly placed while 157 are held back with the normal child. Of those who are two years ahead of their age (Section F.), 5 are properly placed while 35 are held back, and of those who are three years ahead (Section G.), one is in his proper place and eleven are held back. None in these two latter groups are advanced. Nothing could be clearer than the way in which these figures demonstrate what we all know from experience must be true, that is, that we drag the dull child up, trying to keep him up to his grade and hold the bright child back to keep him to the same grade, thus doing gross injustice to both.

Sections H. and J. of this table give the summaries for the others, Section H. giving all of those of each physical age in each year of school, Section J. giving the same for the mental age.

A few illustrations will make the reading of the chart clear and easy. Referring to Chart J, one sees that under the mental age of eight, there are 20 children in the first school year. It might be thought that these had just entered school and consequently are properly placed. Reference to the other sections will show exactly where they are. For example, we find 13 of them in Section A. (see Sec. A., Mental Age 8, Column "First year"), which shows that these children are eight physically and mentally. One is found on Chart C. He is *ten years old physically, eight years old mentally and still in the first year.* These 14 children are certainly old enough to be in a higher grade. The other 6 are found on Charts E., F. and G. three on Chart E. who are physically seven years old, one on Chart F. is six years old, and 2 on Chart G. are only five years old.

Again in Section J. at ten years of age mentally, we find that there are seventeen children in the third year of school. Let us see how these children are distributed on the other tables. On Table A., we find 4 of them who are ten years old physically as well as mentally. These children should of course be in the fifth year of school and there seems to be no reason why they should not be there. On Chart B. we find three more who are eleven years old physically. These 3 are really one year backward but are held back *two* years, possibly through some technicality or because they are especially weak in some one branch. On Section E., we find 7 more of our children. They are nine years old physically—in other words, they are one year in advance of their age. There is another on Chart F. who is only eight years of age and 2 on Chart G. are only seven. It is probable that these children are kept back to fit into the grade that corresponds most nearly to their age, even though their mental ability would warrant their being two years ahead.

Once again, on Section J. we find at the age of nine, there are 17 children in the fifth school year. On section A. we find at the mental age of nine, there are 3 in the fifth school year. These children are also nine years old physically. They have been put ahead a year, perhaps because of good memory or because of some precocious ways, although they have not anything above the normal mentality and should be in the fourth year of school. In Section B. we find 6 of these children of the mental age of nine in the fifth year—they are ten years old physically, thus showing that they are really one year backward and that they have been pushed ahead, undoubtedly in an effort to keep them up to the grade which their physical age requires. In Section C. we find 5 more of this group of the mental age of nine in the fifth year. They are eleven

years old physically. They again, have been pushed forward a year, although it has not been possible to push them forward two years as their physical age would demand. In Section E. we find 3 more. These children are only eight years old physically, although mentally nine. Here you have the precocious child. He is a year ahead of the average child and consequently is pushed along by his ambitious parents or his ambitious teacher, and although he has not the mentality to be in the fifth year, yet he is found there. This is the child that later breaks down and gives rise to the belief that the precocious child is destined to failure later on. He *is*, if his precocity is made the basis for his being crowded way beyond what his actual mental endowments will warrant.

Let us now analyze the situation from the standpoint of the physical age. Referring to Section H. we find that at age ten, there are 14 children in the second school year. On Section A. we find two of these. These are the children who are ten years mentally as well as physically. They have the right to be in the fifth school year and yet they are held back to the second. On Chart C. we find five more, and their mental age is shown to be eight. They have the ability to be in the third school year but are held back in the second. They are dull and slow as is shown by the fact that while they are ten years old they test only eight and consequently they are not only held back to what their mental age would warrant but a year beyond that. The remaining 7 are found on Section D. They are seven years old mentally and consequently are in their right place. One half of the total number are thus found to be where they ought to be—the rest are unjustly treated.

This is the type of child that makes the truant and incorrigible. He knows that he is duller than some but he knows that he is not as dull as his position would indicate. He takes no interest in the work because it is below him and consequently he plays truant or gets into mischief.

As a final illustration, on Chart H. at age nine, we find that there are 4 children in the sixth school year, two years ahead of what their physical age would warrant, but we find upon reference to Chart E. that three of them are ten years old mentally. In other words, they are one year precocious but they are placed two years ahead. They are thus a year ahead of what even their mental ability would warrant. This is perhaps a case of a bright attractive child who is pushed along because he is above the average. And because he is above the average, he is pushed along at *twice the rate* at which he ought to go. Another case where later the child must break down and become useless.

Referring to Chart F. we find the fourth one who is two years ahead of his physical age and is consequently placed where he should be according to his mental ability.

In other words, out of four children, one is correctly placed.

We are conscious that many a reader will feel that we are leaning too hard upon the supposed accuracy of the Binet tests. We have been all through this. We have had the same misgivings about these tests, but the more we use them the more we feel that they will bear all that is put upon them. Besides the demonstration given in the first part of this paper from the distribution curve, we see the same thing in every line of these tables. Refer again to Section J. of this table and note the distribution of the children of the various mental ages through the different grades. Take age eight as an example. This shows perhaps the first complete range and it will be seen that whereas the eight-year-old children should be in the third year of school life, we have 98 at that age with 76 a year below and 20 two years below, while above we have 26, 2 and 1,—a very good distribution curve. Again, at age nine, it runs 5, 45, 65 (the high point) 17, 1. Even at age ten, 3, 17, 100, 106 and 39. Beyond that we lose the curve because we run into the higher school grades where our tests are supplemented by others and are not so definitely comparable.

Besides this, *it is precisely what we all know does happen in the school.* We know that children are held back because they are too bright; we know that they are pushed forward because they are too large for their grade; we know that they are retarded because of some technicality—they are not up in their arithmetic, or they cannot read quite well enough, while in other things they are abundantly able to go ahead. Besides that, we know that this is true from the experience of these children in after life.

It is almost beyond the bounds of possibility that we could get such figures as are shown in this table unless the tests upon which it is based were amazingly accurate, and if they are accurate, it gives us a wonderfully valuable method of measuring our efficiency and our accuracy in the grading of children, and points out the possibilities of great improvement along this line,—much to the advantage of the children and the comfort of the teacher.

The data used in the foregoing tables have also been tabulated to show the relation of the sexes and the difference between the schools that are in the city and those that are outside in the township. These figures are not especially striking but make a good illustration of the possibilities of such data.

It will be seen from looking at the figures for the boys and girls which, by the way, follow the same normal distribution

TABLE V.

	4 to 7 yrs. below	3 yrs. below	2 yrs. below	1 yr. below	At Age	1 yr. Above	2 yrs. Above	3 yrs. Above	4 yrs. Above	Total
City Boys	19	23	59	112	188	119	12	4	0	536
Country Boys	12	13	28	80	102	49	12	3	0	299
City Girls	13	23	37	65	172	106	20	4	1	441
Country Girls	9	20	31	56	89	57	5	3	1	271
Totals	53	79	155	313	551	331	49	14	2	1547
Total Boys and Girls										
Boys	31	36	87	192	290	168	24	7	0	835
Girls	22	43	68	121	261	163	25	7	2	712
Total City and Country										
City	32	46	96	177	360	225	24	8	1	977
Country	21	33	59	136	191	106	17	6	1	670

curve as is seen in the combination of the two, that there are more backward boys than girls. This is a very neat confirmation of the tests since it agrees with statistics everywhere that there are more defective boys than girls. There are more in institutions for the feeble-minded and although this is usually accounted for by the explanation that girls are more easily taken care of at home, therefore do not get into institutions, yet in view of the facts, there is no doubt that there are more feeble-minded boys than girls. There are more boys in the Special Classes in London and in the Hilfsschulen in Germany and in the Special Classes so far formed in the United States, and everything agrees with this thesis.

Comparing city with country children, there are apparently more children above grade in the city than in the country. This probably has little significance in this case and may only mean that the more ambitious youths of the country go into the city to school and so were tested there.

It will be remembered that the foregoing discussion pertains to the children in the first six grades of the public school system. The seventh, eighth, and ninth grades being practically able to pass the twelve year Binet tests and the thirteen year tests being found too difficult, none of the Binet tests were given to these grades. And inasmuch as the tests that were given were not the Binet tests it does not properly come

into this paper. So we pass over them. They will be considered later and reported if anything valuable is discovered.

Turning to the High School, the thirteen year tests together with three others were given to all of these students. We shall consider only those that belong to the Binet scale. Early in our use of the tests, we felt that the thirteen year tests were altogether too difficult and we have accordingly based nothing upon their value. These experiments in the High School confirm that view.

The complete results are given in Table VI.

TABLE VI

Showing how High School pupils succeed with Binet XIII year tests

PART I. BY YEARS IN HIGH SCHOOL

Year of High School	Question 1. "Cutting out"		Question 2. "Triangle"		Question 3. "Differences"	
	Boys	Girls	Boys	Girls	Boys	Girls
1st	9–27	8–17	17–20	4–21	9–28	7–18
2nd	4–9	10–16	9–4	10–16	8–5	9–17
3rd	4–6	5–12	6–4	5–12	2–8	7–10
4th	4–2	3–4	5–1	5–2	6–0	4–3

TABLE VI

PART 2. BY AGES

Phy. Age.	Year of High Sch.	Cutting out		Triangle		Differences	
		Boys	Girls	Boys	Girls	Boys	Girls
13	1st yr.	0–3	0–3	2–1	1–2	1–2	1–2
14	1st yr.	3–4	3–2	2–5	0–5	2–5	2–3
	2nd "	0–1	2–2	0–1	2–2	1–0	2–2
	Totals	3–5	5–4	2–6	2–7	3–5	4–5
15	1st yr.	2–9	2–6	4–8	0–8	2–10	2–6
	2nd "	1–1	2–2	1–1	1–3	2– 0	0–4
	3rd "		0–2		1–1		0–2
	Totals	3–10	4–10	5–9	2–12	4–10	2–12

TABLE VI—*Continued*

16	1st yr.	2–5	2–3	4–5	0–5	2–5	1–4
	2nd "	3–3	3–4	5–1	4–3	1–5	4–3
	3rd "	2–2	0–1	2–2	1–0	0–4	1–0
	4th "	1–0	1–0	1–0	1–0	1–0	0–1
	Totals	8–10	6–8	12–8	6–8	4–14	6–8
17	1st yr.	2–5	1–2	4–3	2–1	2–5	1–2
	2nd "	0–2	0–4	2–0	0–4	2–0	0–4
	3rd "	2–3	3–4	4–1	1–6	2–3	3–4
	4th "	2–1	2–3	3–0	3–2	3–0	3–2
	Totals	6–11	6–13	13–4	6–13	9–8	7–12
18	1st yr.	0–1		1–0		0–1	
	2nd "	0–2	2–3	1–1	2–3	2–0	1–4
	3rd "	0–1	2–5	0–1	2–5	0–1	3–4
	4th "	1–0	0–1	1–0	1–0	1–0	1–0
	Totals	8–4	4–9	3–2	5–8	3–2	5–8
19	1st yr.		0–1		1–0		0–1
	2nd "		0–1		0–1		1–0
	4th "	0–1		0–1		1–0	
	Totals	0–1	0–2	0–1	1–1	1–0	1–1
21	2nd yr.		1–0		1–0		1–0

Examining the Table we see that on question 1 the boys in the first year succeed and fail to the number of 9 and 27 respectively. In the second year 10 succeed while 16 fail, in the third year 4 succeed and 6 fail, in the last year 4 succeed and 2 fail.

The girls' record is as follows. For the first year 8 to 17; second year 10 to 15; third year, 5 to 12; and last year 3 succeed and 4 fail.

Throughout the high school, then, we have for the boys twenty-one successes and forty-four failures; for the girls twenty-six successes and forty-nine failures.

Taken by ages instead of by high school grades the result is no better. This is seen in the second part of the table.

Not only is this question too difficult for high school pupils but even normal highly trained individuals including college professors fail on it to a large extent. One group of about 25 was given the test by the writer and only 6 succeeded. This group was made up of teachers, superintendents of schools, psychologists, mathematicians and biologists. Another group composed entirely of psychologists was tested by the writer

and about twelve succeeded while six failed, giving an average of 66%.

It seems probable that we have here a test, not of what we may call a fundamental and universal human power, but rather a specialized faculty, which may be possessed by some people but not by others although one would not dare say one was of higher intelligence than the other. This perhaps gives us a hint as to what will be necessary in devising tests for higher grades of intelligence. We cannot perhaps hope to find any tests of universal application but rather it will be necessary to test a special gift along different lines.

The second test of the "reversed triangle" fares somewhat better, but not until the senior year does it begin to have the proportion of successes that we have established as necessary in a test. One would expect that the study of geometry had something to do with this result.

As to the third of the Binet tests, it again fares better than the others and shows marked improvement in the results in the senior year. Indeed, like the second one, not until then does it begin to get any reasonable proportion of successes, as will be seen.

There are very few who get all of them correct but if we allow a margin of two and consider the test passed if three differences out of the five are given correctly, then we have in the last year of high school, the boys all succeeding and the girls in the ratio of four to three.

Taking the tests altogether we find that only one boy in the first year of high school gets them all. There are no successful girls. In the second year there are no boys who succeed and but three girls. In the third year we have one boy and no girl. In the fourth year we have four boys and two girls. The last year in the high school ought to mean, according to the usual way of counting, a child eighteen or nineteen years old. It would seem, then, as though we could say that any person who passed these three tests had at least the mentality of an eighteen year old person. But the tests are so special in their application that it would not be safe to say that one who did not pass them did not have the mentality of at least eighteen. This being the case they hardly seem of great value as tests.

Prof. Binet has published in the April, 1911, number of the Bulletin De La société Libre Pour L'Étude Psychologique de L'Enfant, his latest comment on his measuring scale. He gives a modified list of questions.

In this list he has done three things. First, he has reduced the number of questions to five in every year except age IV, (there he finds only four questions). This obviates one slight

difficulty which has been met with in scaling the results. Because some years had five questions and some years seven or eight, there was a little difficulty in counting up. However, here at Vineland we have never found that of great importance. It is a decided advantage, however, to have all the years with the same number of questions.

The next thing that he has done has been to omit some of the questions which are strictly dependent upon training and educational opportunity, such as the reading and writing tests. This is good.

Thirdly, he has transposed certain tests from one year to another with the idea of improving the general scale.

With these changes, however, we cannot in every case agree. The results of our experience as given in the preceding tables do not warrant us in making all of the changes that Binet proposes. We give herewith the complete list as we would place it as the result of our experience and following as closely as possible Prof. Binet's desire in the matter.

BINET SCALE

New	Old		Number of successes and failures
		III.	
No change	No change	1. Nose, eyes, mouth.	
		2. It rains. I am hungry.	
		3. Repeat 7 2.	
		4. Picture (enumerates.)	
		5. Name.	
		IV.	
		1. Boy or girl.	
		2. Key, knife, penny.	
		3. Repeat 7, 4, 8.	
		4. Lines.	
		V.	
1.	1.	1. Compares 3 and 12 grams, 6 and 15.	32- 2
2.	2.	2. Copies square.	23-11
3.	new	3. Repeats sentence of 10 syllables.	new
4.	4.	4. Counts four pennies.	30- 4
5.	3.	5. "Patience."	20-12
		VI.	
1.	7.	1. Morning or afternoon.	30-12
2.	4.	2. Defines fork, table, chair, horse, mama.	35- 6
VII 3.	5.	3. Puts key on chair, brings box, shuts door.	25- 7
VII 1. (30-4)	1.	4. Shows right hand, left ear.	35- 8
5.	3.	5. Chooses prettier.	31- 9

BINET'S SCALE—*Continued*

		VII.	
VI 4. (24-9)	7.	1. Counts 13 pennies.	94- 5
2.	6.	2. Describes pictures.	83-25
VIII 3. (34-3)	1.	3. Sees picture lacks eyes.	87- 9
VI 3. (17-22)	4.	4. Can copy diamond.	95- 8
5.	from VIII	5. Names colors, red, blue, green, yellow.	97- 5
		VIII.	
1.	6.	1. Compares two objects from memory, butterfly, fly; wood, glass; paper, cloth.	87- 2
2.	4.	2. Counts backwards 20 to 1.	90- 1
omitted	from IX	3. Repeats days and week.	85- 4
VII 4. (46-49)	2.	4. Counts stamps 111222.	79-14
5.	from VII	5. Repeats 5 figures.	36- 7
		IX.	
1.	3.	1. Makes change 20c—4c.	33-23
2.	4.	2. Definitions better than use.	45-27
VIII 4. (49-33)	1.	3. Knows date.	48- 7
4.	from X	4. Repeats months in order.	48- 6
X 1 (3-1)	6.	5. Arranges 5 weights.	44-11
		X.	
IX 3. (31-14)	2.	1. Knows money, 1c, 5c, 10c, 25c, 50c, $1, $2, $5, $10.	104- 5
2.	new	2. Copies design	new
—	new	3. Repeats six figures.	new
4.	4.	4. Comprehends easy questions.	98- 8
5.	3.	5. Uses 3 words in two sentences.	92-17
		XI.	
X 3.	1.	1. Sees absurdity: painter, brothers, locked in room, R. R. accident, suicide.	48- 4
XII 2.	2.	2. Uses 3 words in a single sentence.	39-14
XII 3.	3.	3. Gives 60 words in three minutes.	35-3
XV 3.	XII 2.	4. Gives three rhymes.	45-5
XII 5.	5.	5. Puts dissected sentences together.	35- 9
		XII.	
XV 1.			
XII 4.	1.	1. Repeats 7 figures.	37- 7
	XI 4.	2. Defines charity, justice, goodness.	5- 0
XV 3.			
1.	3 (revised)	3. Repeats sentence of 26 syllables.	15-21
XV 5.	new	4. Resists suggestion.	new
	4.	5. Problems: (a) Hanging from limb. (b) Neighbors visitors.	40-3
		XV.	
1.		1. Interprets picture.	
		2. Changes hands of clock.	
		3. Code.	
		4. Opposites.	

BINET'S SCALE—*Continued*

		ADULT
1.	XIII 1.	1. Cutting paper.
2.	XIII 2.	2. Reversed triangle.
3.	XIII 3.	3. Gives differences of abstract words.
4.	new	4. Difference between president of a republic and a king.
5.	new	5. Gives sense of a selection read to him.

Binet says that with the new scale *every* question under any given age should be answered, for a child to be credited with that age—instead of *all but one*, as in his earlier plan.

Following each question we give the figures repeated from Table II which show the number of successes and failures on each question by the children of the age at which the question is now placed. In the column before the question is given the number of the question as it was in Binet's older scale, while the first column gives the position that this question has in Binet's new proposed scheme.

Where Binet's new position is different from ours, we give the figures showing the proportion of successes and failures on that question at the age which Binet proposes to place it. This shows in every case that according to our results it is utterly impossible to consider the test in the year in which Binet places it.

In the first four years there are no changes. In age V question 3, "repeating sentence of ten syllables," is entirely new and we take it on Binet's authority. In Age VI there are two which Prof. Binet would place in age VII, but our figures show that they are answered in a goodly proportion at VI.

In question IX, 1. "making change," our use of this was more difficult than the original, which came from the fact that Binet used a 20 sous piece from which the child was to subtract four sous. We, not having a coin of the value of 20c, used the 25c and in order that it might not be too easy to subtract four from five, we made the price 9c; 25—9 is rather a difficult problem for a child of nine, as our results show. We propose now to make it 20—4, exactly as Binet has done and give the child two dimes. This may offer a little confusion but we think on the whole that it will be preferable to the other plan and will probably reduce the difficulty so that the question may properly come in at this age. IX 2. "definitions better than by use," we found rather difficult, it is only succeeded in, as will be noticed, by 45 while 27 fail. However, we feel that we have been a little too exact in our requirements of this question. We have generally required that the child indicate in some way some notion of the *genus*. If we take it simply

"superior to use," and accept as satisfactory all those answers in which the child tells what the article is made of or something about its shape it would make the successes greater, which will probably make it satisfactory.

In X 2 the copying design is new, at least to this system. It is the test that Binet suggested in his 1905 list. We have also put in here the repetition of six figures. Decroly and Degand expressed a desire that the memory for figures should be put in, and our experience shows that a child of ten can generally remember six figures, so it would seem to be a good question to put in here.

The comprehension of questions Binet has proposed to divide up, placing the first three ("easy") in age nine but we had no room for it there and so have kept it as it was before.

Age XI, Binet has thrown out entirely. He has no questions for age XI, but makes all those questions go over to XII with the exception of the first one, which he takes back into X. Now, our experience, as will be shown by the figures does not warrant any such thing, we have accordingly kept them in age XI, with the one exception that we have transferred the question of definition of abstract nouns to age XII and brought back to age XI the giving of rhymes, as our experience is that it is perfectly easy for this age.

In age XII we have the questions that were there before plus the new one that Binet suggests, "resisting suggestion." We proposed four questions for age XV, inasmuch as Binet has proposed questions for this year. We are not very certain that they are satisfactory, but they seem worth trying.

The questions for what Binet calls "ADULTS" (which he explains means only "more than fifteen") we have accepted, and followed him in his new suggestions and put in the old questions for XIII, and added two more, "the difference between a president of a republic and a king" and "to give the sense of a selection that is read to the child."

The tests up to and including twelve years are certainly eminently satisfactory. Our proposed list for XV and Binet's "ADULT" must be further tested out to see if they are of any value.

It would seem that with such a start as Binet has given us, some one ought to be able to work out tests for the higher ages. We need above all things, a test for boys and girls beyond twelve years. As Dr. Huey has expressed in the article in the Journal of Psycho-Asthenics, this is the time at which many young people break down and if not arrested in development earlier, become arrested then, and fail to develop those qualities that enable them to become useful and good men and women. Some system of tests which would bring out

these defects would be of inestimable value in the treatment of these people socially, in recognition of how much responsibility they had and were able to bear and what they could be expected to do.

It certainly is time for psychology to attack this problem and we believe that an answer is possible.

LITERATURE

L'Adolescence: Etudes de Psychologie et de Pédagogie, par GABRIEL COMPAYRE. Alcan, Paris, 1909. 195 p.

La Vie mentale de l'Adolescent et ses Anomolies. par AUG. LEMAITRE, Foyer solidariste. Saint Blaise, 1910. 238 p.

L'Ame de l'Adolescent, par P. MENDOUSSE. Alcan, Paris, 909. 1315 p.

During the last two years, in striking contrast to the decades or, one might say, centuries, preceding the publication of Dr. Hall's two volumes on "Adolescence" five books on this topic have appeared, all by authors whose standing and reputation entitle them to consideration. One of these, it is true, falls within the date 1911 but appears so early in the year that it may properly be classed with the others. The first of these, Compayre's "L'Adolescence," is so largely based on Dr. Hall's work that it may almost be considered in the light of an extended review of it, into which the author has introduced his own points of agreement and difference. It has the advantage of making accessible to French readers in simplified and attractive form many of the points contained in the large book which would otherwise be inaccessible.

Prof. Lemaitre's "La vie mentale de l'adolescent" is a collection of separate studies of psychological peculiarities that are presented by the mental life of the adolescent, synopsias, internal speech, paramnesias, mental dissociations, complex hallucinations, multiple personality, parapsychism, bad habits and suicide. Among the synopsias discussed are the tendency to personify letters and figures of which some interesting cases are also to be found in Dr. Hall's "Educational Problems," Vol. II, pp. 336 *et seq.;* colored hearing; and number forms. Some rare synopsias occurring in individuals are also discussed. The chapter on internal speech, an interesting contribution to the subject, is a study published the major part of which was in the Archives der Psychologie in 1904. The studies in paramnesia, mental dissociation, hallucinations and multiple personality, all present interesting material, and the chapter on bad mental habits is of special interest from a pedagogical point of view. The chapter on the suicide of adolescents is an analysis of the predisposing mental states. As a whole, these studies present rather than solve the problems discussed, but the book is full of suggestion for both the psychologist and the teacher.

"L'Ame de l'adolescent," by Professor Mendousse, though written from a psychological point of view, shows everywhere the interest of the teacher of boys. The author discusses the precursory signs of adolescence, devotes a chapter to mental changes of puberty and the customs and rites associated with this age by peoples of various times and countries and treats at some length the subject of adolescent love and dreaming and the characteristics of adolescent reasoning. He also discusses courage and in what sense it is an acquisition of adolescence, emphasizing the sentiments involved, *e. g.*, vanity, regard for opinion, emulation, pride and honor and the conflict with timidity. The characteristic attitude of the professor in a French *lycée* appears in his view of the necessity of discipline, restraint and *surveillance* for the development of character, to the incoherence and instability of which a special chapter is devoted. There are also chapters on organic growth and changes and their psycho-physical effects, mental instability, fatigue and refreshment.

All three of these books are devoted chiefly to the adolescent boy, a chapter in Compayre's book being dedicated to the adolescent girl, who, however, presents a totally different problem from the boy and who greatly needs to be studied. THEODATE L. SMITH.

Der Begriff der staatsbürgerlichen Erziehung, von GEORG KERSCHENSTEINER. B. G. Teubner, Leipzig, 1910. pp. viii, 62.

Kerschensteiner has done notable work in the schools of Munich for many years, in the way of developing in the pupils a spirit of co-operative study. In this little book he presents his idea of what constitutes the essence of civic nurture (*staatsbürgerlichen Erziehung*). Of course the idea of using the public schools for the development of citizens is not a new one. The term has as many meanings as it has had representative advocates, and part of the author's task is to free his meaning from possible misinterpretations. The realization of Kerschensteiner's ideal calls for a reshaping of the method of instruction. Only as children are given work that calls out their best efforts to attain a common end, are they in a way to be properly trained for the best sort of community life. At present the stress in school is on the intellect, the aim is to make the pupils unlike. True, "morals" has a place on the programme; but it has a subject of study. Now, morals is a matter of life, and the schools cannot prepare for life unless in their organization they embody the typical conditions of social life. The basal relations which influence social life in the state, and which may profitably be incorporated in the work of the school, are: (a) a common work, with the features of division of labor; (b) the articulation of each and his work into some great economic plan; (c) the general self-direction with its efforts to the balancing of interest, and with its voluntary subordination of all to the recognized authority of the co-operating group. These basic conditions can be established in the school. In the higher schools the subject of history is eminently fitted for civic nurture,—if carried on with free discussion in class of data gathered from varied sources by the pupils. For less capable children, and for all whose limited experience or immaturity of mind unfit them for the consideration of generalized ideas, instruction must take the form of training; for them the schools must be made *Arbeitsgemeinschaften im kleinen*. School gardens, laboratories and workshops offer good places for co-operative work, *e. g.*, a class of 48 pupils could be divided into 12 groups of 4 each. To one of these groups could be assigned the determination of the specific gravity of lead. One child weighs, another reads and records the weight; a third checks the work of the first; the fourth checks the second. These parts could be shifted (should be in case of lack of agreement) until the work of every child is supported by the group. The task is not finished until the group is a unit. It behooves the brighter children to help teach their less capable mates. Thus is foreshadowed a state not of feverish competition nor of dull uniformity, but one wherein the gifted may find their highest satisfaction in devoting their abilities to the service of the common weal.

FRANK DREW.

Cost accounting pathfinder, by FRANK E. GOODWIN. St. Louis, Mo., Midland Publishing Co., 1910. 267 p.

The author shows that most merchants who fail do so from lack of system. All expense and income should be divided minutely and every item of receipt and expense set forth and analyzed; this is only the sound business logic needful for success. It is said that not one retailer in 100 keeps a true account of selling expenses. In March, 1907, the author collected returns from about 30,000 dealers in different lines and found that less than one per cent. could give an accurate analysis of their selling cost. There is mostly guess work. Dealers especially stumble when they reach percentages. In answer to the question how many dollars must I handle before

I have made a dollar for myself, the average merchant must handle $21. Now, the hod-carrier earning $4.50 a day has no worries and need make no account, but the average retailer in this country has invested $14,400 with a gross business of $31,000 and an average profit of 4.4 per cent., equalling 9 per cent. of investment. Out of this, the retailer must live, lay up a reserve. More than 25 out of 100 retailers go out of business or change every year. More than 90 per cent. eventually give up retailing and only one in 20 gets competency in it. In 1909, there were 11,845 failures in business in this country. Of these, 4,089 lacked capital; 2,861 were incompetent by their own confessions. Men detest accounting. The average active life of the retailer is about 20 years, not more. Their cry often is plenty of sale, but no profit. Every dealer should charge a salary to himself. The proprietor's salary is a legitimate expenditure. Then must follow rent of building, whether owned or not, interest on investment, whether owned or borrowed and all fixed expenses like taxes, insurance, water, lights, fuel, subscriptions, donations, telegrams, phone messages, advertising, goods stolen and other losses.

Business men are dishonest in dealing with themselves. Goods in stock for years are entered at first cost. Of 215 retail stores placed in receivers' hands, the stock of nearly all was found valued at least 50 per cent. too high. This is like watered stock. Stock taking can be superseded by a perpetual inventory showing depreciation of all stock and furniture so that one can see precisely how everything stands to date. Profit is the will-o'-the-wisp to be always chased and found wherever possible.

The principles of industrial management, by JOHN C. DUNCAN. N. Y., Appleton & Co., 1911. 323 p.

The material of this book was gathered from many sources and is one of the best of quite a number that bear upon the general problem of efficiency. The present work is divided into three parts, economic environment including a glance at industrial education, plant location, the ideal situation and business specialization. Part II, equipment of the plant including the synthetic analytic assembling of industries and productions and its effect on layout and structure, the building and the workers and the power problem. Part III is on organization and management, treating three types: the labor force, payment of workmen, their records, the record of raw material of finished and unfinished goods, record of equipment.

Household administration: its place in the higher education of women. Edited by Alice Ravenhill and Catherine J. Schiff. London, Grant Richards, Ltd., 1910. 324 p.

This book endeavors to define the importance and scope of household administration to-day and to approve the necessity of adequate preparation, and to show that the domestic arts are no collection of empirical conventions to be acquired by imitation and exercised by instinct. The topics discussed are a brief sketch of woman's position in the family, the place of biology in her equipment, science in the household, economic relations of it, the relations of sanitary science to family life and individual efficiency, woman and the domestic arts, needlework, dressmaking and housecraft.

Spelling efficiency in relations to age, grade and sex and the question of transfer, by J. E. WALLACE WALLIN. Baltimore, Warwick & York, Inc., 1911. 91 p. (Educational Psychology Monographs.)

The author considers spelling proficiency as measured by school and grade totals, the relations to sex, whether spelling efficiency acquired in column drills can be transferred to dictate compositions and how teachers and principals regard spelling drills in the elementary schools of Cleveland. His conclusion is that syllabification is an aid and so are interschool con-

tests. The spelling methods he thinks very effective. Intensive daily drill in these is necessary, but other methods should be used. Instruction here should be teaching, not unteaching. The words selected for intensive drill should vary with the character of the school population and should be those in common use and not those that the children will never use again. Drill is especially effective with poor spellers. Children differ greatly in ideational and memory type so that spelling should appeal to a variety of mental images, particularly the visual, auditory, motor, etc.

Modern Germany, by J. Ellis Barker. London, Smith, Elder & Co., 1909. 660 p.

This edition is greatly enlarged and there are at least five new chapters. By general consent, Mr. Barker's book is the most comprehensive and vivid picture of modern Germany that has yet been presented to English writers. Among the 26 chapters, are discussion of foreign policy; expansion of Germany in different directions; relations between Germany and France; army; navy; the emperor; social democracy; education and miseducation; rural industria; waterways and canals; railways; shipbuilding; chemical industries; fiscal policy, wages, etc. We have no space here to go into details concerning so comprehensive a book. One striking feature of it should be noticed and that is that in the chapter on education, the author has little but condemnation, insisting that the educational work of the country has been vastly overrated, that neither political nor economic success is dependent upon it, that even the technical schools involve great loss of time, that education is too theoretical to be practical, that it is unhygienic, the body is neglected, etc. In the chapter on chemical industries, it is shown that their development in 25 years has been meteoric, that this progress has been gradual and not spasmodic. About 170,000 workmen who are paid more than $50,000,000 a year are employed. Besides the direct advantage derived from these, other industries are indirectly greatly benefited, *e. g.*, beet sugar 20,000,000 of tons per year, worth $100,000,000. This enormous sugar industry Germany owes to the chemists. This science has enormously stimulated agriculture. Many a natural monopoly possessed by countries that control the tropics is now threatened by chemical discoveries, *e. g.*, indigo, artificial musk, vanilla, camphor, saccharine sugar, tar dyes instead of vegetable, etc. Germany imports five times more chemical raw products than she exports. Her dependence on these raw products is rapidly increasing so that her success is not due to gifts of nature, but to patient work and an enlightened government policy, etc. In 1900, there were more than 7,000 German chemists trained at universities and technical high schools. Manufacturers can no longer thrive on secrets.

Work, wages and profits; their influence on the cost of living. By H. L. Gantt. New York, The Engineering Magazine, 1911. 194 p.

This work treats of the application of scientific method to the labor problem, utilization of labor, the compensation of workmen, day and piece work, task work with a bonus, training workmen in habits of industry, co-operation, fixing habits in an industry, profits and their influence on the cost of living.

Efficiency as a basis for operation and wages, by Harrington Emerson. New York, The Engineering Magazine, 1911. 224 p. (Works Management Library.)

This excellent little book treats of typical inefficiencies and their significance, national efficiencies, their tendencies and influence, the strength and weakness of existing systems of organization, line and staff organization in industrial concerns, their standards, their relations to organization and to results, the realization of standards in practice, the modern theory

of cost, accounting, the location, and elimination of waste, the efficiency system in operation, standard times and bonus, what the efficiency system may accomplish, the gospel of efficiency.

Das Leben der Kinder, von PAOLA LOMBROSO. Autorisierte Übersetzung von Helene Goldbaum. Leipzig, Otto Nemnich, 1909. 112 p. (Pädagogische Monographien, hrsg. von E. Neumann. VI Band.)

The author of this work, the famous professor of Pathological Anatomy at Turin, has summed up her views on child nature and development in chapters treating the following topics, how the child expresses itself at survival, its mental powers and the law of minimal expenditure of energy, the evolution of thought, why children like myths and *Märchen*, child drawing and the psychology of the proletarian child.

The career of the child, by MAXIMILIAN P. E. GROSZMANN. Boston, Richard G. Badger, 1911. 335 p.

We are glad to have this author's view. He has read widely and had much experience, first with the Ethical Training School of New York and lately, at his own institution. Among the topics he considers here are the dignity and responsibility of the teaching profession, the kindergarten, co-ordination, the physical side, the course of study, the manual principle, mathematical evolution, geography, history, nature, language, reading, writing, hygiene, discipline, defectives, crime and the high school.

The town child, by REGINALD A. BRAY. London, T. Fisher Unwin, 1907. 333 p.

This valuable and comprehensive treatise deals first with theory, with the problems of the town, the environment and the man, man and environment; and second, with practice, the child and the needs of life, the school, the state and religion, the child and religion, the child and the world.

Pubertät und Schule, von HANS GUDDEN. München, Otto Gmelin, 1911. 31 p.

This address really adds nothing whatever to our knowledge of the subject and seems to have been worked up from a very few and exclusively German authorities, with no sign of any knowledge on the author's part that there are others.

When should a child begin school, by W. H. WINCH. Baltimore, Warwick & York, Inc., 1911. 98 p. (Educational Psychology Monographs.)

This is an interesting and important monograph discussing the age of entry and subsequent progress in school, its relations to the social circumstances of children, influence of early entry on behavior and attentiveness, with the summarized results, viz., that at least up to five, early entrance confers no advantage, but there may be slight advantage so far as school work is concerned if entrance is after that age. The author's conclusions are against the advantages of early entry. We confess we cannot follow the author to these conclusions, and even if they be true, he certainly does not sufficiently take account of the whole child.

Principles of education, by FREDERICK ELMER BOLTON. New York, Charles Scribner's Sons, 1910. 790 p.

This work comprises 28 chapters, as follows: the new interpretation of education; adaptation, adjustment, and specialization of functions; development and specialization of the nervous system and the significance for education; the theory of recapitulation; educational significance of recapitulation; the culture epochs theory and education; from fundamental to accessory in education; instinct in relation to education; nature and nurture; inheritance and education; correlations between mind and body; work, fatigue, and hygiene; individual variations and differences; the

nature of memory processes; the nature and educational significance of association; the wise use and training of memory; imitation in relation to education; sensory education; nature of imagination; imagination and education; apperception in relation to education; motor expression in relation to education; the nature of thinking; the concept in education; induction and deduction in education; emotional life and education; interest and education; volition and moral education; general discipline and educational values. It is one of the most comprehensive, philosophical and matured works on pedagogy that this country has yet produced. It is distinctly in advance of any German treatise of modern times. The author has read widely and thought much. His material has been well digested with successive classes. He is progressive and up to date. It is, as the title indicates, a work that essentially deals with principles and not with details. We hope to give a more extended review later.

England's need in education, by JOSEPH S. KNOWLSON. London, A. C. Fifield, 1911. 187 p.

The trouble with education, according to this work, is to be found by taking a broad view, and beginning with primary education and not neglecting the will for the intellect; it is necessary to study the child, to have a new time-table, develop new methods, give the teacher more freedom, make the rate payer feel that he is getting more for his money, reconstructing religious training, introduce circle teaching, etc.

Pädagogisch-Psychologische Arbeiten: Veröffentlichungen des Institutes für Experimentelle Pädagogik und Psychologie des Leipziger Lehrervereins. Band 1. Leipzig, Alfred Hahns, 1910. 208 p.

This is the first publication of the Institute for Experimental Pedagogy and Psychology by the Teachers' Association of Leipzig. We are told at the outset that Wundt's psychology has conquered the world. Nevertheless, a very small portion of the students of pedagogy know anything of experimental psychology and this Verein with this organ attempts to remedy the matter. We are given in considerable length the methods of organization, description of its eight rooms, its topics, the number of its professors, etc. In a second article, Max Brahn characterizes experimental pedagogy, traced back German-wise to Kant, and has something to say about the study of the child and individual psychology. The two long articles are a study of the first instruction in language for deaf mutes based on statistical studies and experimental psychological investigations. The second is a study of the scope of the field of attention of adults compared with that of children. The method used is that of recognizing dots and the author finds that the field of attention is "once or twice smaller in children than in adults, that the children make more errors and that the constancy of their attention is more fluctuating." Considerable space is given to describing a pendulum tachistoscope and new apparatus for experimental investigations. On the whole, neither this nor that study of attention which is followed so hard after by an English group of experimental psychologists is quite as promising as we wish it might be. In fact, the number of school topics really investigated up to date in the laboratory has been rather limited and even in these, the results acquired have been of very precious though very small significance.

Educational values, by WILLIAM CHANDLER BAGLEY. New York, The Macmillan Company, 1911. 267 p.

This work is more important and accessible with some analysis of the contents of each chapter and with a good index. The writer treats of inherited and acquired control of conduct, specific habits, ideas, meanings, concepts, facts, principles, ideals and educationalized standards, prejudices, tastes and aptitudes. He then discusses the limitations of educative forces

in modifying conduct, passing later to part second, the classification of functions and values. Here he discusses the criterion and rubrics of function and value, values to be realized in fulfilling the training and the instructional, inspirational, disciplinary, recreative and interpretative functions respectively, each of the above six adjectives designating a chapter and finally, he discusses the school environment as a source of educative material. He has sought to organize the methods of teaching upon a rational basis which it now lacks. The time has not yet come for a final statement of educational functions for psychology and the higher thought processes are not yet sufficiently known.

Craftsmanship in teaching, by WILLIAM CHANDLER BAGLEY. New York, The Macmillan Company, 1911. 247 p.

The writer discusses optimism in teaching, how to increase efficiency and test it in supervision, the relations of education, utility, the scientific spirit, the possibility of training children to study, a plea for the definite in education, science as related to the teaching of literature, the new attitude towards drill, the ideal teacher. This is one of those indexless books which has nothing but the above table of contents to guide the reader to what he wants. Such books nowadays are not read. Indeed, very few books are read, but they are looked at for reference by those who are seeking very special topics. Perhaps this is most of all the case of this kind that expatiate over the wide field of general education, books that might have had a good many other different titles.

A study of greatness in men, by J. N. LARNED. Boston, Houghton, Mifflin Co., 1911. 303 p.

This book contains five chapters: what goes into the making of a great man, Napoleon who is regarded as a prodigy without greatness, Cromwell who was imperfect in greatness, Washington who was impressive in greatness, and Lincoln who was simplest in greatness. The essays are well written and rhetorical.

Essays on duty and discipline; a series of papers on the training of children in relation to social and national welfare. New York, Cassell & Co., 1910.

This book consists of a number of essays and articles culled from various sources upon the subject. There are in all thirty articles. Some of the most taking of these are the spoiled child, old- and new-fashioned education, sentimental England, wanted a fair start, save the boys, have we the grit of our forefathers to endure hardness, the new way of life, appeal to church women, moral and religious training, things we do not want.

The adult school movement, by EDGAR F. HOBLEY and THOMAS W. MERCER. London, Headley Bros., 1910. 80 p.

This book does not pretend to be exhaustive, but rather suggestive, indicating the importance of a movement that has pursued its way more or less sporadically up to date and which now needs more efficient organization. The chapter heads are the rise and growth of the movement, its objects, methods, principles, significance, influence, perils, possibilities.

Principles of education, by W. FRANKLIN JONES. New York, The Macmillan Company, 1911. 293 p.

This is a day of pedagogic unrest. The history of education has never found a time when the struggle to attain sound theory and to realize it was so keen. The author discusses the meaning of education in the usual normal school style, to really read which is almost utterly impossible He then talks about nature study groups, social studies, formal studies, motivation, play impulse, teacher's influence, methods—subjective, objective, deductive, inductive, will-training, etc. The writer of this note spent a

good deal of time one Sunday afternoon hunting this book through and through, up and down to see whether there was any indication that the author had informed himself in any up-to-date way and secondly, whether he really had any power of thought or fruitful suggestion. These questions remain unanswered in the writer's mind.

Annals of educational progress in 1910; a report upon current educational activities throughout the world. By JOHN PALMER GARBER. Philadelphia, J. B. Lippincott Co., 1911. 396 p. (Lippincott's Educational Series edited by Martin G. Brumbaugh.)

This general survey of progress during the last year is of course highly sub-divided. Part I treats vocational and agricultural education; part II, developments directly affecting public schools and their various types; part III, of developments affecting the higher institutions; part IV, on pay; part V, social progress and problems; part VI, foreign institutions; part VII, meetings and miscellaneous. The general purpose is to furnish at the close of each year a succinct statement of educational movements and to give as clear a view as possible of the trend and outlook of affairs affecting education throughout the world.

The Tenth Yearbook of the National Society for the Study of Education. Part I, The city school as a community centre. Chicago, University of Chicago Press, 79 p. *Part II, The rural school as a community centre.* 75 p.

Part I treats adult education and the New York plan in public lectures, the Cleveland plan, vacation, playgrounds, organized athletics, evening recreation centres, the Rochester Civic and Social Centres, home and school associations, community used schools. The purpose of the second part, as expressed in the title, is first discussion with reference to the agricultural high school, then to district schools in the country, then to rural school extension, to agricultural clubs and housekeeping, then the library, modes of appreciating art, organized recreation. Each part has a good bibliography

The relative strength of nurture and nature, by ETHEL M. ELDERTON. London, Dulau and Co., 1909. 40 p. (University of London, Galton Laboratory for National Eugenics. Eugenics Laboratory Lecture Series III.)

This pamphlet is a vigorous plea for heredity versus education and environment. The author says "so far as our investigations have gone, they show clearly the small influence of environment." The heredity factor is everywhere preponderant and "it is not at all easy to say that any of the environmental factors we have measured up to the present time have any important effect on the child." "Improvement in social conditions will not compensate for bad heredity." The author's studies have chiefly been of factory children in the lowest classes.

French University degrees. (A handbook of information for foreigners) Pub. by The Comité de patronage des etudiants etrangers. Paris, 1910. Second edition. 115 p.

This pamphlet begins with the University of Paris, describing what is required for the doctorate in letters, science, pharmacy, medicine, the certificate of studies, the diploma of colonial medicine, of legal medicine, of chemistry, the certificate of penal science, the diploma of pharmacology for foreigners, and the diploma of university studies in letters. Fourteen other French universities, some of which give but one and some about as many degrees as that of Paris, are treated the same way.

The obvious Orient, by ALBERT BUSHNELL HART. New York, D. Appleton & Co., 1911. 369 p.

The author made an eight months trip east and sets down his impressions. The first 80 pages are devoted to the Pacific Coast. He next describes

Japan, then China, then the American and British Colonies. These are rather more than notes of travel and have the advantage of being written by a professor of history who has given some attention to the subject. The great interest in the East now almost makes any personal contribution of this sort more or less valuable.

The evolution of literature, by A. S. MACKENZIE. New York, T. Y. Crowell, 1911. 440 p.

This book appeals to those who have grown weary of beaten pathways and affords an intelligible view of what is usually termed comparative literature to which, we are told, an adequate manual has until now been lacking. The development of literature is correlated with that of society, as indeed it should be. The writer begins with primitive man and primitive literature in Africa, Oceanica, Asia, America, primitive art, dance, drama, barbaric literature in Oceanica, in Asia, in America, barbaric dance, and drama, autocratic literature and its data, democratic literature and its data, from which he evolves certain provisional laws. It will thus be seen that the author limits his survey essentially to literature in very primitive conditions and in very primitive forms.

Love's pilgrimage; a novel, by UPTON SINCLAIR. New York, M. Kennerley, 1911. 663 p.

This is a novel concerned almost exclusively with the relations of a splendid and affectionate young wife and a husband who has about all the eccentricities and unpracticalities of genius. It is a pitiful story of struggles with poverty and disappointment. His love for her is a very accessory thing in his soul, which is almost entirely fixed upon literary ambitions which he is unable to realize. They live in tents in summer in the simplest way. In the winter, he is often gone from her for months at a time. The chief feature of the book, however, is the frankness with which it deals with the sex problem in its various aspects. The details of a temptation which the hero, a pure young man, resisted, and again of the consummation of the marriage relation seem to the writer of this note to have no excuse but to be simply and directly inflammatory, while the score of pages devoted to the birth scene with all kinds of medical details seems to have no *raison d'etre* and should the novel become popular and have any general social influence, it cannot but tend directly to magnify the already too great phobia against child-bearing on the part of women who read it.

Position of woman; actual and ideal; with preface by SIR OLIVER LODGE. London, Nisbet, 1911. 170 p.

Eight writers here, men and women, attempt to survey and discuss the general position of women and their claims. These papers, which were addressed at as many different meetings are here printed. The topics are the position of woman biologically, in history, in the family, in the professions, the psychological dangers to women in modern social development, her education, spiritual motherhood and philanthropic service, and a general closing address by Richard Lodge. The tone of all the papers is very temperate.

The education of a music lover, by EDWARD DICKINSON. New York, Charles Scribner's Sons, 1911. 294 p.

After an introductory chapter on the new musical education, the following topics are discussed: the music lover's need of education, definite hearing, the problem of form, beauty of melody and rhythm, harmony, performance, the art of the pianist, the art of song, music and poetry, the technique of the singer, problem of expression, representative music, music and history and biography, the music lover and the higher law.

Penal and reformatory institutions, edited by Charles Richmond Henderson. Correction and prevention, four volumes prepared for the Eighth International Prison Congress. N. Y., Charities Publication Committee, 1910. 345 p. (Russell Sage Foundation.)

Correction and prevention is the title of this work. In this volume will be found accounts by specialists of the institutions of correction through which the criminal law is enforced. The story is not boastful but critical, the weak points being faithfully disclosed. We have no national system but most of the book is devoted to reformatory prisons in the northern states of the Union. One expert traces the evolution of the older prison system and the beginning of reforms; others describe the principles of the indeterminate sentence; another, prisons for women. Other topics are the prison physician, educational work in prison, labor, officers and discipline, workhouse, police system, congregate system, the released prisoner.

Correction and prevention, edited by Charles Richmond Henderson. Four volumes prepared for the Eighth International Prison Congress. N. Y., Charities Publication Committee, 1910. 168, 119 p. (Russel Sage Foundation.)

After an historical introduction by F. H. Wines and the statement of the declaration of principles promulgated at Cincinnati in 1870, F. B. Sanborn describes the work of Mr. Wines; Z. R. Brockway, the American reformatory prison system; F. H. Wines, possible and actual penalties for crime; Paul U. Kellogg describes the work of S. J. Barrows; W. M. F. Round that of General R. B. Hayes, and six biographies follow. The work contains a number of interesting illustrations.

Preventive treatment of neglected children, by HASTINGS H. HART, with special papers by leading authorities. Correction and prevention, four volumes prepared by the Eighth International Prison Congress. N. Y., Charities Publication Committee, 1910. 419 p. (Russell Sage Foundation.)

The first part treats institutions for delinquent children of both sexes including the George Junior Republic; the next, public and private institutions for dependent children; the third, the cottage and congregate institutions for both classes; fourth, child helping societies and homes; fifth, family care, placing out system; sixth, juvenile court; seventh, miscellaneous preventive agencies. One chapter gives a brief though very inadequate account of the study of children.

American embassies, legations, and consulates mean better foreign business; an argument in pictures and photographs by the AMERICAN EMBASSY ASSOCIATION, N. Y. 1911. 187 p.

It is a good thing for this country to show up to the world the inferior status of official residences of our representatives abroad and the very great imperfections of organization in the various offices and the preparation of their heads.

The Lady, studies of certain significant phases of her history. By EMILY JAMES PUTNAM. New York, Sturgis & Walton Co., 1910. 323 p.

The writer characterizes in the various chapters the ideals of ladies of different lands and ages with illustrations, the Greek and Roman lady, the abbess, the lady of the castle, Renaissance, the salon, the blue stocking, slave states, etc.

Seven great foundations, by LEONARD P. AYRES. New York, Dept. of Child Hygiene, Russell Sage Foundation, 1911. 79 p.

This is a very interesting account of the following seven funds; Peabody Education Fund; John F. Slater Fund for the Education of Freedmen; Carnegie Institution of Washington; The General Education Board;

Carnegie Foundation for the Advancement of Teaching; Russell Sage Foundation; Anna T. Jeanes Foundation. It is a great convenience to all interested to have these seven articles of the able author bound up together.

The Grecians, by JAMES ELROY FLECKER. London, J. M. Dent & Sons, Ltd., 1910. 140 p.

These dialogues discuss the aim of education, physical, technical, and points to the Greeks as the embodiment of the very highest ideal. The author has tried to make his dialogues very lively and sprightly, with a good deal of feeling, tone and color.

The vocabulary of high school Latin, by GONZALEZ LODGE. Rev. Ed. Pub. by Teachers College, Columbia University, N. Y., 1909. 217 p. (Contributions to Education. Teachers College Series.)

The aim of this work is to set forth a complete vocabulary of Cæsar's Gallic War, Cicero's six orations and the first six books of Virgil. Statistics are given of the number of times every word occurs and a selection of 2,000 words has been made comprising usually those most frequent so arranged that they can be taught at the rate of so many per year. The total number of words is 4,650, of which 849 occur in all three authors, 638 in Cæsar and Cicero, only 384 in Cæsar and Virgil, etc. The number of words occurring five times or more is surprisingly small, but these are the essential words in Latin. A student commanding the above 2,000 will have a vocabulary of all the ordinary Latin he is likely to meet and really much more because of compound words. This bears on the question of reading Latin at sight. The only criticism we have to suggest is that the English equivalent is not repeated in the appendix beginning on page 189 where the vocabulary is arranged in the order of occurrence.

An anthology of modern English prose (1741 to 1892), by ANNIE BARNETT and LUCY DALE. London, Longmans, Green and Co., 1911. 450 p.

This anthology, with a similar collecton from earlier writers which is to follow it, is designed to take a middle place between the small treasuries that can be put in the pocket and the larger series that are available for more severe and special studies. The selections here begin with those of Samuel Richardson (deceased 1761) and end with those of Robert Louis Stevenson (deceased 1894), about fifty authors in all.

The study of history in secondary schools; report to the American Historical Association by a committee of five. New York, Macmillan Co., 1911. 72 p.

This report is written chiefly by professors in universities—three of them —with one principal of a high school. We cannot understand why high school teachers are not themselves competent to determine what their pupils should do in this as in other topics. This report is simply rattling the old chains and while it marks time a little, makes almost no progress toward the solution of one of the most important and yet one of the simplest of all pedgagogic problems, provided only it could be left to the solution of those most competent to handle it.

High School exercises in grammar, by MAUDE M. FRANK. New York, Longmans Green, & Co., 1911. 198 p.

This book is designed for those who believe that the study of grammar should be continued in the high school. It therefore reviews the work that is supposed to have been given in lower grades and develops it still further. It purveys material needed for rapid and intensive work, which is believed to be the most practicable and profitable in the high school. Sentences mostly selected from standard authors have been arranged to illustrate

forms and construction of language in the general chapters, the verb and its complements, noun, pronoun, adjective, adverb, preposition, interjection. The final chapter is on variety of use and a series of diagrams.

Seventy-fourth annual report of the Board of Education. Mass., 1909-1910. Boston, Wright & Potter, Printing Co., Jan., 1911. Public Document No. 2, 296, 131 p.

This report is of special interest as it is the first of David Snedden, the new Commissioner of Education, whose contribution takes up the first 90 pages of the work.

Brazil, by PIERRE DENIS. Translated, and with a historical chapter, by Bernard Miall and a supplementary chapter by Dawson A. Vindin. London, T. Fisher Unwin, 1911. 388 p.

The relations expressed by the passive voice, by EDWARD T. OWEN. Reprinted from Vol. 17, Part I, of the Transactions of the Wisconsin Academy of Sciences, Arts and Letters. July 1910. 71 p.

List of members of the American Medico Psychological Association. March, 1911.

A Spanish grammar, by JOHN WARREN. London, Longmans, Green & Co., 1910. 230 p. (Longmans' Commercial Series, edited by Alfred Nixon.)

A world-correspondence of women-students. Association of women students in Leyden. Rotterdam, W. L. &. J. Brusse, 1910. 263 p.

La Jeunesse de Shelley, par A. KOSZUL. Paris Librarie, Bloud et Cie, 1910. 439 p.

Geoffrey Chaucer, par E. LEGOUIS. Paris, Bloud et Cie, 1910. 261 p.

Les Sœurs Brontë, par E. DIMNET. Paris, Bloud et Cie, 1910. 276 p. (Écrivains Étrangers.)

Some commentaries on the teaching of piano-forte technique, by TOBIAS MATTHAY. London, Longmans, Green, and Co., 1911. 55 p.

Sandalion: eine offene Antwort auf die Falschungs-Anklagen der Jesuiten. Von ERNEST HAECKEL. Frankfurt a. M., Verlag G. m. b. H. 1910. 55 p.

Praktische Anleitung zur Syphilisdiagnose auf biologischem Wege, von P. MULZER. Berlin, Julius Springer, 1910. 128 p.

The Carnegie Foundation for the Advancement of Teaching. Fourth annual report of the president and of the treasurer, November, 1909. Boston, D. B. Updike, Merrymount Press, 1909. 201 p.

Report of the Commissioner of Education for the year ending June 30, 1910. Vol. I, Whole number 442. Washington, D. C., Government Printing Office, 1910. 662 p.

"Obscene" literature and constitutional law. A forensic defence of the freedom of the press, by THEODORE SCHROEDER. New York, privately printed for forensic uses. 439 p.

Truths: talks with a boy concerning himself. By E. B. LOWRY, M. D. Chicago, Forbes & Co., 1911. 95 p.

Confidences: talks with a young girl concerning herself. By EDITH B. LOWRY, M. D. Chicago, Forbes & Co., 1911. 94 p.

An anthology of modern English prose (1741-1892) by ANNIE BARNETT and LUCY DALE. New York, Longmans, Green & Co., 1911. 451 p.

The social evil in Chicago: study of existing conditions with recommendations by the Vice Commission of Chicago. Chicago, Gunthorp-Warren Printing Company, 1911. 399 p.

Second course in algebra, by HERBERT E. HAWKES, WILLIAM A. LUBY, and FRANK C. TOUTON. Boston, Ginn & Co., 1911. 264 p.

Mothers in council. London, Wells Gardner, Darton & Co., Ltd., 1910. Volume XX, 256 p.

Enquête sur l'alimentation de 1605 ouvriers belges, par A. SLOSSE et E. WAXWEILER. Paris, Marcel Rivière, 1910. 260 p. (Instituts Solvay. Travaux de L'Institut de Sociologie. Fascicule 9 des notes et mémoires recherches sur le travail humain dans l'industrie. Misch & Thron, éditeurs.)

The pupils' arithmetic by JAMES C. BYRNES, JULIA RICHMOND and JOHN S. ROBERTS. New York, the Macmillan Co., 1911. Book 3, 256 p. Book 4, 235 p.

Second course in algebra, by HERBERT E. HAWKES, WILLIAM A. LUBY and FRANK C. TOUTON. Boston, Ginn & Co., 1911. 264 p.